2012

IPG PHOTONICS®

annual report

proxy statement

notice of annual meeting

WORLD LEADERSHIP IN HIGH POWER FIBER LASERS

who we are

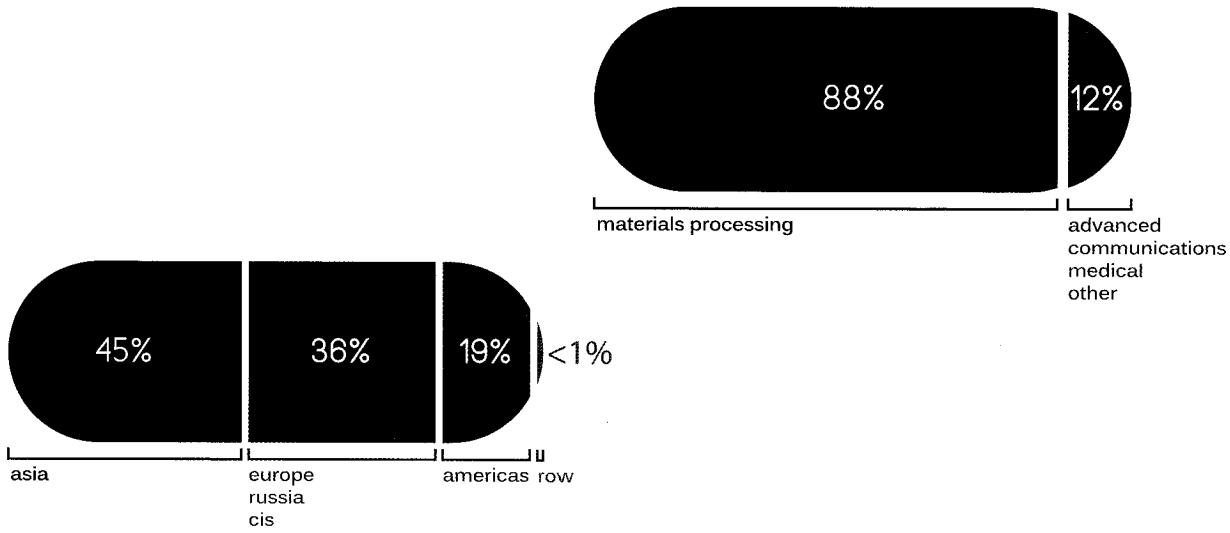
IPG Photonics is the world leader in high-power fiber lasers and amplifiers.

Founded in 1990, IPG pioneered the development and commercialization of optical fiber-based lasers for use in diverse applications, primarily materials processing. We are headquartered in Oxford, Massachusetts with additional manufacturing facilities and offices throughout the world.

Fiber-based lasers are a new generation of lasers that combine the advantages of semiconductor diodes, such as long life and high efficiency, with the high amplification and precise beam qualities of specialty optical fibers to de-liver superior performance, reliability and usability. Fiber lasers are displacing traditional lasers in many current applications and enabling new applications for lasers.

We are vertically integrated such that we design and manufacture most of our key components used in our finished products, from semiconductor diodes to optical fiber preforms, finished fiber lasers and amplifiers. The Company's vertically integrated manufacturing provides significant competitive advantages and enhances its ability to meet customer requirements, manage costs and improve performance.

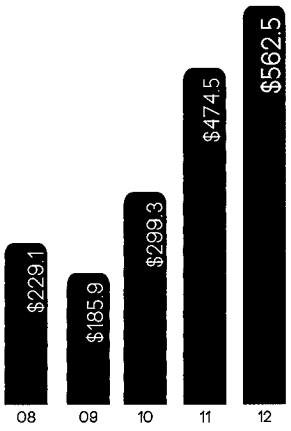
Our products play a growing role in manufacturing in many industries around the world. IPG Photonics' lasers are used to cut, weld, mark, clad, braze, drill, harden and strip metals, plastics and other materials. Fiber laser processing and fabrication is used in general manufacturing, and the automotive, heavy, aerospace, consumer, semiconductor and electronics industries.



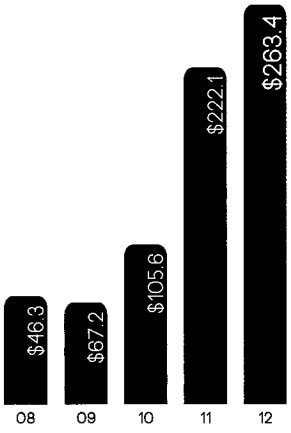
our strategy

- Continue to leverage our technology to displace existing laser and non-laser technologies
- Target new applications for fiber lasers
- Expand our product portfolio & develop integrated laser systems business to address new applications
- Lower costs through manufacturing improvements
- Expand global reach to attract new customers
- Manufacture simple, more usable lasers

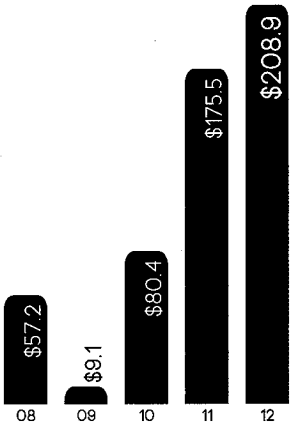
our financial highlights



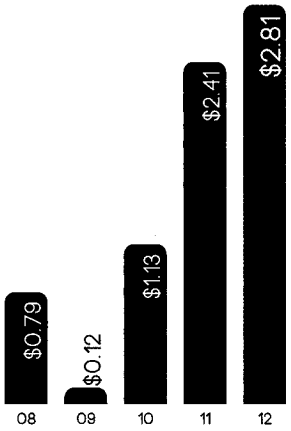
net sales
five-year compound annual growth of 24%
(in millions)



high power laser sales
(in millions)



operating income
(in millions)



diluted earnings per share

year ended december 31

(dollars in millions, except per share data)

	2008	2009	2010	2011	2012
net sales	$ 229,076	$ 185,894	$ 299,256	$ 474,482	$ 562,528
gross margin	46.8%	34.6%	48.9%	54.2%	54.2%
operating margin	25.0%	4.9%	26.9%	37.0%	37.1%
net income attributable to IPG Photonics Corporation	36,654	5,419	53,991	117,759	145,004
diluted earnings per share attributable to IPG Photonics Corporation	$ 0.79	$ 0.12	$ 1.13	$ 2.41	$ 2.81
working capital	131,997	144,083	218,031	315,294	539,504
total assets	313,218	312,636	441,855	608,132	895,498
IPG Photonics Corporation stockholder's equity	238,172	256,430	316,600	443,323	742,927
net cash provided by operating activities	34,671	54,405	63,432	87,351	175,276

to my fellow stockholders

For IPG, 2012 was a year marking continued growth and investment. Despite a global economic environment that could best be described as uncertain, IPG turned in a strong performance. Revenue increased 19% from 2011, and net income attributed to IPG grew more than 23%. These growth rates outpaced our major laser competitors as we continue to gain sales in industrial laser applications due to the inherent benefits of fiber lasers that continue to gain broader acceptance. But we are not standing still. We also continued to invest in new products, fixed assets, people and technology to support our growth now and for the future.

■ Our growth continued to be driven by the adoption of fiber laser technology across a wide variety of markets, geographies and applications. Fiber lasers provide substantially greater reliability, efficiency and cost benefits compared with their legacy laser technology competitors. The industrial market increasingly recognizes and seeks these features, and this is why we continued to see increased demand from established laser materials processing applications, such as welding, cutting and marking. We also saw increased demand for other material applications, including cladding and percussion drilling of aerospace components. In addition, we reported strong revenue growth in advanced applications, such as research, driven by sales of our high-power, high-brightness fiber lasers.

we are building for the future

■ Our leadership in the fiber laser market has been the key driver behind our growth. We continue to invest in our strong portfolio of innovative products to sustain this into the future. We plan to introduce a number of new products in 2013. These include a 100-kilowatt laser for deep penetration welding and other applications; a hand-held laser welder for automotive applications; a quasi-continuous-wave (QCW) laser with 12, 15 and 18-kilowatts in peak power for the aerospace and other industries; a 100-watt green laser for the semiconductor industry; a new family of low-cost, compact and efficient ultra-violet (UV) lasers; and a 350 nm pulsed laser for marking plastic and other applications. We also announced a new generation of our core high-power laser product. The new generation has a new design, including new power supplies and control systems that provide even greater reliability and electrical efficiency. The higher efficiency, reliability and performance of these products will go far in enabling us to maintain and advance our leadership position.

■ We began to turn our sights on fine processing applications as a new market for fiber laser based products. The fine processing market includes precision cutting, drilling and micromachining of non-metals, including glass, semiconductors and ceramics. We are investing in these applications to capitalize on future growth opportunities and to win sales in these markets, which are newer to IPG. Early in 2013, we acquired Mobius Photonics to accelerate our entry into the UV market with a fiber laser based product that we expect to have significant benefits over existing excimer and diode pumped solid state lasers. The legacy lasers are costly to purchase and operate, and lack the inherent reliability that our fiber lasers provide. Mobius brings us a patent portfolio and proprietary techniques relating to the use of lasers in micromachining. Combined with IPG's fiber and pump diode and component technology, we will be well-equipped to develop a cost-effective UV fiber laser to compete against existing UV laser technologies.

■ Another initiative in 2012 was to selectively expand our laser systems business. While currently a relatively small portion of our total sales, our systems strategy is focused on developing systems for highly customized new applications or in areas of the global market not currently served by our OEM customers. We also see

opportunities to create systems for applications that have resisted fiber laser adoption because potential customers are still using low and medium power YAG lasers. In these markets, having complete fiber laser systems solutions will help us drive market penetration for our fiber laser sources. In September 2012 we acquired J.P. Sercel Associates (JPSA), a leading global supplier of UV excimer and diode pumped solid state (DPSS) industrial laser micromachining systems for precision processing in high-volume manufacturing. Operating now as IPG Microsystems, our new unit strengthened our integrated laser systems product offerings for fine-processing and is poised to take advantage of the new UV fiber laser products under development at IPG.

our continuing success in winning new business

■ We are building for the future with expanded production, research, development and application facilities for our devices and systems. The new facilities in Russia, the United States and Germany will add 545,000 square feet of additional space.

■ Beyond bricks and mortar, we continue to also invest in people, processes and technology. To support our strategic marketing, acquisition and sales initiatives, we recently added significant management bench strength by appointing Trevor Ness, David Gray and Yuri Erokhin to leadership roles in these respective areas. Each has a proven record of success. During 2012, we appointed new general managers in China, Japan and Korea, each with substantial industrial and technical expertise, to continue to expand our presence in Asia. And we have added management resources in worldwide service and information technology as well. We look forward to the combined contributions of these new team members. We also strengthened our board in 2012 by welcoming John R. Peeler, CEO of Veeco Instruments, who brings a wealth of relevant experience, including managing high-growth technology companies and servicing customers in demanding markets.

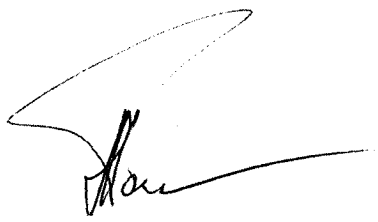
■ We financed our investments in infrastructure, people, process and technology with our operating cash flow and the proceeds from the public offering of 3,250,000 shares we closed in March 2012. Reflecting the successful offering, as well as our improved profitability and cash flow in 2012, we concluded the year with approximately $384 million in cash and cash equivalents and a balance sheet that reflects a strong financial position. In December 2012, given both the healthy level of cash, our confidence in IPG's long-term growth prospects and a changing tax environment, the Board approved a special cash dividend of $0.65 per share.

■ We expect 2013 to be a year of continued growth and investment aimed at capitalizing on the enormous opportunities we see to expand IPG's business longer term. Depending on the timing of investments relative to sales growth, these dynamics may temporarily affect operating margins from quarter to quarter. But we still expect to maintain gross margins in the range of 50% to 55% for the full year.

■ Looking farther ahead, our continuing success in winning new business with major OEMs, entering new geographies, applications and markets, and advancing our development pipeline, reinforce our confidence in IPG's prospects for long-term growth and profitability.

■ On behalf of the IPG Photonics team, I would like to thank all of our stockholders for your continued support. We look forward to another successful year.

Sincerely,



Valentin P. Gapontsev, Ph.D.
Chairman and Chief Executive Officer
April 10, 2013

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

Form 10-K

(Mark One)

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2012

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
Commission File Number: 001-33155

IPG PHOTONICS CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**04-3444218**
(State or other jurisdiction of incorporation or organization)	*(IRS Employer Identification No.)*
50 Old Webster Road, Oxford, Massachusetts	**01540**
(Address of principal executive offices)	*(Zip Code)*

Registrant's telephone number, including area code:
(508) 373-1100

Securities registered pursuant to Section 12(b) of the Act:

Title of Class	Name of Exchange on Which Registered
Common Stock, Par Value $0.0001 per share	**The NASDAQ Stock Market LLC**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☑ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☑ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☑

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☑ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☑

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant was approximately $1.4 billion, calculated based upon the closing price as reported by the Nasdaq Global Market on July 2, 2012. For purposes of this disclosure, shares of common stock held by persons who own 5% or more of the outstanding common stock and shares of common stock held by each officer and director have been excluded in that such persons may be deemed to be "affiliates" as that term is defined under the Rules and Regulations of the Exchange Act. This determination of affiliate status is not necessarily conclusive.

As of February 25, 2013, 51,415,585 shares of the registrant's common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for its 2013 Annual Meeting of Stockholders to be filed pursuant to Regulation 14A within 120 days of the end of the registrant's fiscal year ended December 31, 2012 are incorporated by reference into Part III of this Annual Report on Form 10-K to the extent stated herein.

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This Annual Report on Form 10-K contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and we intend that such forward-looking statements be subject to the safe harbors created thereby. For this purpose, any statements contained in this Annual Report on Form 10-K except for historical information are forward-looking statements. Without limiting the generality of the foregoing, words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "estimate," or "continue" or the negative or other variations thereof or comparable terminology are intended to identify forward-looking statements. In addition, any statements that refer to projections of our future financial performance, trends in our businesses, or other characterizations of future events or circumstances are forward-looking statements.

The forward-looking statements included herein are based on current expectations of our management based on available information and involve a number of risks and uncertainties, all of which are difficult or impossible to accurately predict and many of which are beyond our control. As such, our actual results may differ significantly from those expressed in any forward-looking statements. Factors that may cause or contribute to such differences include, but are not limited to, those discussed in more detail in Item 1 (Business) and Item 1A (Risk Factors) of Part I and Item 7 (Management's Discussion and Analysis of Financial Condition and Results of Operations) of Part II of this Annual Report on Form 10-K. Readers should carefully review these risks, as well as the additional risks described in other documents we file from time to time with the Securities and Exchange Commission (the "SEC"). In light of the significant risks and uncertainties inherent in the forward-looking information included herein, the inclusion of such information should not be regarded as a representation by us or any other person that such results will be achieved, and readers are cautioned not to rely on such forward-looking information. We undertake no obligation to revise the forward-looking statements contained herein to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

PART I

ITEM 1. *BUSINESS*

Our Company

IPG Photonics Corporation ("IPG", the "Company", the "Registrant", "we", "us" or "our") is the leading developer and manufacturer of a broad line of high-performance fiber lasers, fiber amplifiers and diode lasers that are used for diverse applications, primarily in materials processing. Fiber lasers are a new generation of lasers that combine the advantages of semiconductor diodes, such as long life and high efficiency, with the high amplification and precise beam qualities of specialty optical fibers to deliver superior performance, reliability and usability.

Our diverse lines of low, mid and high-power lasers and amplifiers are used in materials processing, advanced, communications and medical applications. We sell our products globally to original equipment manufacturers ("OEMs"), system integrators and end users. We market our products internationally primarily through our direct sales force. We have sales offices in the United States, Germany, Italy, Turkey, the United Kingdom, France, Spain, Japan, China, South Korea, Singapore, India and Russia. Our major manufacturing facilities are located in the United States, Germany and Russia.

We are vertically integrated such that we design and manufacture most of our key components used in our finished products, from semiconductor diodes to optical fiber preforms, finished fiber lasers and amplifiers. We also manufacture certain complementary products used with our lasers including optical delivery cables, fiber couplers, beam switches, optical heads and chillers. In addition, we offer laser-based systems for certain markets and applications. Our vertically integrated operations allow us to reduce manufacturing costs, ensure access to critical components, rapidly develop and integrate advanced products and protect our proprietary technology.

We are listed on the Nasdaq Global Market (ticker: IPGP). We began our operations in Russia in 1990 and we were incorporated in Delaware in 1998. Our principal executive offices are located at 50 Old Webster Road, Oxford, Massachusetts 01540, and our telephone number is (508) 373-1100.

Industry Background

Conventional Laser Technologies

Since the laser was invented over 50 years ago, laser technology has revolutionized a broad range of applications and products in various industries, including general manufacturing, automotive, medical, research, consumer products, electronics, semiconductors and communications. Lasers provide flexible, non-contact and high-speed ways to process and treat various materials. They are widely used to transmit large volumes of data in optical communications systems, various medical applications and test and measurement systems. They are also incorporated into manufacturing, medical and other systems by OEMs, system integrators and end users. For a wide variety of applications, lasers provide superior performance and a more cost-effective solution than non-laser technologies.

Lasers emit an intense light beam that can be focused on a small area, causing metals and other materials to melt, vaporize or change their character. These properties are utilized in applications requiring very high-power densities, such as marking, printing, welding, cutting, drilling, cladding and other materials processing procedures. Lasers are well-suited for imaging and inspection applications, and the ability to confine laser light to narrow wavelengths makes them particularly effective in medical and sensing applications. A laser works by converting electrical energy to optical energy. In a laser, an energy source excites or pumps a lasing medium, which converts the energy from the source into an emission consisting of particles of light, called photons, at a particular wavelength.

Historically, carbon dioxide ("CO_2") gas lasers and crystal lasers have been the two principal laser types used in materials processing and many other applications. They are named for the materials used to create the lasing action. A CO_2 laser produces light by electrically stimulating a gas-filled tube and delivers the beam through free space using mirrors to provide direction. A crystal laser uses an arc lamp, pulsed flash lamp or diode stack or array to optically pump a special crystal. The most common crystal lasers use yttrium aluminum garnet ("YAG") crystals infused with neodymium or ytterbium. Some crystal lasers also use mirrors in free space to deliver the beam or direct the beam through fiber optics.

Introduction of Fiber Lasers

Fiber lasers use semiconductor diodes as the light source to pump specialty optical fibers, which are infused with rare earth ions. These fibers are called active fibers and are comparable in diameter to a human hair. The laser emission is created within optical fibers and delivered through a flexible optical fiber cable. As a result of their different design and components, fiber lasers are more reliable, efficient, robust and portable, and easier to operate than conventional lasers. In addition, fiber lasers free the end users from fine mechanical adjustments and the high maintenance costs that are typical for conventional lasers.

Although low-power fiber lasers have existed for approximately four decades, their increased recent adoption has been driven primarily by our improvements in their output power levels and cost as well as their superior performance compared with conventional lasers. We have successfully increased output power levels by developing improved optical components such as active fibers that have increased their power capacities and improved their performance. Fiber lasers now offer output powers that exceed those of conventional lasers in many categories. Also, semiconductor diodes historically have represented the majority of the cost of fiber lasers. The high cost of diodes meant that fiber lasers could not compete with conventional lasers on price and limited their use to high value-added applications. Over the last several years, however, our semiconductor diodes have become more affordable and reliable due, in part, to substantial advancements in semiconductor diode technology and increased production volumes. As a result, the average cost per watt of output power has decreased dramatically over the last decade. Because of these improvements, our fiber lasers can now effectively

compete with conventional lasers over a wide range of output powers and applications. As a pioneer in the development and commercialization of fiber lasers, we have contributed to many advancements in fiber laser technology and products.

Advantages of Fiber Lasers over Conventional Lasers

We believe that fiber lasers provide a combination of benefits that include:

- *Superior Performance.* Fiber lasers provide high beam quality over the entire power range. In most conventional laser solutions, the beam quality is sensitive to output power, while in fiber lasers, the output beam is virtually non-divergent over a wide power range. A non-divergent beam enables higher levels of precision, increased power densities and the ability to deliver the beam over greater distances to where processing can be completed. The superior beam quality and greater intensity of a fiber laser's beam allow tasks to be accomplished more rapidly, with lower-power units and with greater flexibility than comparable conventional lasers.
- *Lower Cost.* The purchase price for fiber lasers is generally lower than that of YAG lasers and of many conventional CO_2 lasers. Fiber lasers are cheaper to operate due to their lower energy usage, lower required maintenance costs and better processing speeds. Fiber lasers convert electrical energy to optical energy approximately 2 to 3 times more efficiently than diode-pumped YAG lasers, approximately 3 times more efficiently than conventional CO_2 lasers and approximately 15 to 30 times more efficiently than lamp-pumped YAG lasers. Because fiber lasers are much more energy-efficient and place lower levels of thermal stress on their internal components, they have substantially lower cooling requirements compared to those of conventional lasers, which also improves overall energy efficiency. Fiber lasers have lower to no maintenance costs due to the high performance and long life of our single-emitter diodes, fiber optics and other optical components, which can be used for up to 100,000 hours without replacement. The higher power density of the fiber laser beam also allows for higher processing speeds in many applications, which increases the operating efficiencies on a per-part basis.
- *Ease of Use.* Many features of fiber lasers make them easier to operate, maintain and integrate into laser-based systems as compared to conventional lasers. There are no moving parts in the fiber laser so they do not require adjustments of internal components.
- *Compact Size and Portability.* Fiber lasers are typically smaller and lighter in weight than conventional lasers, saving valuable floor space. While conventional lasers are delicate due to the precise alignment of mirrors, fiber lasers are more durable and able to perform in variable environments.
- *Choice of Wavelengths and Precise Control of Beam.* The design of fiber lasers generally provides a broad range of wavelength choices, allowing users to select the precise wavelength that best matches their application and materials. Because the beam is delivered through fiber optics, it can be directed to the work area over longer distances without loss of beam quality.

Fiber amplifiers are similar in design to fiber lasers, use many of the same components, such as semiconductor diodes and specialty optical fibers, and provide many of the same advantages in the applications that require amplification.

Notwithstanding the benefits offered by fiber lasers, there remain applications and processes where conventional laser technologies may provide superior performance with respect to particular features. For example, crystal lasers can provide higher peak power pulses and fiber lasers do not generate the deep ultra-violet light that is used for photolithography in many semiconductor applications. In addition, CO_2 lasers operate at wavelengths that are optimal for use on many non-metallic materials, including plastics.

Our Competitive Strengths

We believe that our key competitive strengths position us to take advantage of opportunities to displace traditional lasers and enable use of fiber lasers in new applications. Our key strengths and competitive advantages include:

World's Leading Producer of Fiber Laser Technology. We are the world's largest manufacturer of fiber lasers. As a pioneer and technology leader in fiber lasers, we have built leading positions in our various end markets with a large and diverse customer base. Based on our leadership positions, we are able to leverage our scale to reduce costs for our customers and drive the proliferation of fiber lasers in existing and new applications. We rely on several key proprietary technologies, including pumping technology, manufacturing of fiber to withstand the high output power of our lasers, gain blocks and optics that contribute to the superior performance and reliability of our products.

Vertically Integrated Development and Manufacturing. We develop and manufacture all of our key high-volume specialty components, including semiconductor diodes, active fibers, passive fibers and specialty optical components. We believe that our vertical integration and our high-volume production enhances our ability to meet customer requirements, reduce costs, accelerate and focus development, shorten lead times, limit the spread of trade secrets and provide competitive pricing advantages to us while maintaining high performance and quality standards.

Breadth and Depth of Expertise. We have extensive know-how in materials sciences, which enables us to make our specialty optical fibers, semiconductor diodes and other critical components. We also have experience in optical, electrical, mechanical and semiconductor engineering, which we use to develop and manufacture our proprietary components, products and systems.

Diverse Customer Base, End Markets and Applications. Our diverse customer base, end markets and applications provide us with many growth opportunities. In 2012, we shipped more than 25,000 units to over 1,900 customers worldwide, with no single customer representing more than 7% of our sales. Our products are used in a wide variety of applications and end markets worldwide. Our principal end markets and representative applications within those markets include:

Materials Processing	
General manufacturing	• Welding, hybrid welding and cutting • Marking, engraving and printing • Brazing and hardening • Prototyping, cladding and stripping
Automotive	• High-strength steel cutting and welding • Welding tailored metal blanks, frames, seats and transmissions • Brazing and welding of auto frames • Seam welding
Heavy industry	• Hardening and welding pipes in nuclear, wind turbine and pipeline industries • Welding and cutting thick plates for ships and rail cars • Drilling for natural resources
Aerospace	• Welding titanium air frames • Cladding parts • Percussion drilling of parts
Consumer	• Electronics and credit card marking • Cutting and marking parts for electronics and appliances • Welding razor blades and batteries • Stent and pacemaker manufacturing
Semiconductor and electronics	• Computer disk manufacturing and texturing • Photovoltaic manufacturing • Memory repair and trim
Advanced Applications	• Obstacle warning and light detecting and ranging • Special projects and research • Directed energy demonstrations • Sensing and instrumentation
Communications	• Broadband — fiber to premises • Broadband — cable video signal transport • Metro and long-haul wire-line DWDM transport
Medical	• Skin rejuvenation and wrinkle removal • General surgery and urology • Dental

Broad Product Portfolio and Ability to Meet Customer Requirements. We offer a broad range of standard and custom fiber lasers and amplifiers, enabling deployment in a wide variety of applications and end markets. Our vertically integrated manufacturing and broad technology expertise enable us to design, prototype and commence high-volume production of our products rapidly, allowing our customers to meet their time-to-market requirements.

Our Strategy

Our objective is to maintain and extend our leadership position by pursuing the following key elements of our strategy:

Leverage Our Technology to Increase Sales. As fiber lasers become more widely accepted, we plan to leverage our position as the leader in fiber lasers and our applications expertise to develop solutions for customers and increase our position in the broader laser market. We believe that our fiber lasers will continue to displace traditional lasers in many existing applications due to their superior performance and value. Over the last decade, our pulsed fiber lasers have become widely accepted in laser metal marking applications and now have a leading position in those applications. More recently, our high-power continuous wave ("CW") fiber lasers have been accepted by a growing number of laser cutting system OEMs for two- and three-dimension cutting, one of the largest laser materials processing applications. We plan to continue to leverage our fiber laser technology by pursuing large-scale laser applications where our fiber lasers offer improved customer value and performance. Some of the more significant applications we intend to target include: (i) welding of thick steel with our high-power lasers; (ii) micro-processing with our quasi-CW ("QCW") fiber lasers; (iii) processing of non-metals, such as plastics, with our new high-power thulium lasers; and (iv) fine-processing, scribing and marking with our high-power green lasers and new ultra-violet ("UV"), lasers now under development.

Target New Applications for Lasers and Expand into Broader Markets. We intend to expand the use of fiber lasers into additional applications where faster or higher quality processing, higher power, portability, efficiency, size and flexible fiber cable delivery can lead customers to adopt fiber lasers instead of non-laser solutions. We believe that the advantages of fiber laser technology can overcome many of the limitations that have hindered the adoption of conventional lasers in broader industrial markets and processes. Using our manufacturing scale and technology innovations, we have been successful in reducing the cost of manufacturing with lasers, making fiber lasers a more attractive manufacturing alternative. We target applications where higher power, portability, efficiency, size and flexible fiber cable delivery can lead customers to adopt fiber lasers instead of non-laser solutions. Certain industry trends such as the use of high-strength steel in automotive manufacturing and decreasing the weight of vehicles are driving the use of fiber lasers over other manufacturing methods such as stamping, non-laser welding and adhesives. Other trends, such as miniaturization of parts and electronics, contribute to the use of lasers because no other tools can work as precisely. We are working on developing new applications for fiber lasers through internal research and in partnership with customers and industrial institutes.

Expand Our Product Portfolio. We plan to continue to invest in research and development to add additional wavelengths, power levels and other parameters while also improving beam quality, as well as developing new product lines and laser-based systems. Using our core technologies and breadth of experience, we plan to expand the wavelengths at which our lasers operate. This includes UV lasers that can be used for fine-processing applications and mid-infrared lasers that can be used for medical applications, non-metal materials processing and other novel applications. We have increased the output power of our green lasers for use in the semiconductor market. We will continue to expand sales of specialized laser-based systems to meet the specific needs of manufacturing end users whose requirements are not met by standard systems or in certain geographic areas where fiber laser systems are not currently available. In 2012, we acquired a business that develops and produces industrial grade UV excimer, solid state and pico-second laser micromachining systems. We also expanded our capabilities to manufacture high-power laser systems for certain applications and markets and developed a high-power scanning system for multiple materials processing applications.

Lower Our Costs Through Manufacturing Improvements and Innovation. We plan to seek further improvements in component manufacturing processes and device assembly as well as innovation in components and device designs to improve performance and decrease the overall cost per watt for our products. As we increase our volumes, we are better able to negotiate price reductions with certain of our suppliers. We intend to leverage our technology and operations expertise to manufacture additional components in order to reduce costs, ensure component quality and ensure supply. In 2012, we machined more of our mechanical parts, manufactured more of the printed circuit boards we use, and redesigned certain optical components to improve quality and decrease costs. We also further decreased the cost of our packaged diodes. In addition, we manufactured additional components that we had previously outsourced, such as mechanical cabinets, printed circuit boards and optical sub-assemblies. By reducing the cost per watt of our lasers and maintaining the lower operating cost of our products, we believe that we can increase laser use in applications in which conventional lasers could not be used economically.

Expand Global Reach to Attract Customers Worldwide. Our customers' manufacturing operations have expanded in emerging markets and are moving to lower-cost international locations. We have increased and will continue to increase our international sales and service locations to respond to our customers' needs. In 2012, we opened a new sales and service office in Turkey. We are considering increasing our presence in additional countries with large manufacturing infrastructures.

Products

We design and manufacture a broad range of high-performance optical fiber-based lasers and amplifiers. We also make packaged diodes, direct diode lasers, laser systems, communications systems and materials processing laser systems that utilize our optical fiber-based products as well as other laser sources. Many of our products are designed to be used as general-purpose energy or light sources, making them useful in diverse applications and markets.

Our products are based on a common proprietary technology platform using many of the same core components, such as semiconductor diodes and specialty fibers, which we configure to our customers' specifications. Our engineers and scientists work closely with OEMs, system integrators and end users to develop and customize our products for their needs. Because of our flexible and modular product architecture, we offer products in different configurations according to the desired application, including modules, rack-mounted units and tabletop units. Our engineers and other technical experts work directly with the customer in our application and development centers to develop and configure the optimal solution for each customer's manufacturing requirements. We also manufacture certain complementary products that are used with our lasers, such as optical delivery cables, fiber couplers, beam switches, optical heads and chillers.

Lasers

Our laser products include low (1 to 99 watts), medium (100 to 999 watts) and high (1,000 watts and above) output power lasers from 0.5 to 2 microns in wavelength. These lasers either may be CW, QCW or pulsed. We offer several different types of lasers, which are defined by the type of gain medium they use. These are ytterbium, erbium, thulium and Raman. We also sell fiber pigtailed packaged diodes and fiber coupled direct diode laser systems that use semiconductor diodes rather than optical fibers as their gain medium. In addition, we offer high-energy pulsed lasers, multi-wavelength lasers, tunable lasers, single-polarization and single-frequency lasers, as well as other versions of our products.

We believe that we produce the highest-power solid-state lasers in the industry. Our ytterbium fiber lasers reach power levels of up to 100,000 watts. We also make single-mode and low-mode output ytterbium fiber lasers with power levels of up to 20,000 watts and single-mode, low-output erbium and thulium fiber lasers with power levels of up to 400 watts. Our compact, durable design and integrated fiber optic beam delivery allow us to offer versatile laser energy sources and simple laser integration for complex production processes without compromising quality, speed or power.

We also sell laser diode chips and packaged laser diodes operating at 9XX nanometers. We sell our own family of high-power optical fiber delivery cables, fiber couplers, beam switches, chillers and other accessories for our fiber lasers. Recently, we introduced a high-power scanner for use with our fiber lasers.

IPG offers a retrofit service to replace CO_2 and lamp-pumped YAG laser sources with fiber lasers in many welding, cutting, drilling and other systems, allowing customers to retain their existing laser systems. IPG also makes active and passive laser materials and tunable lasers in the middle-infrared region.

Amplifiers

Our amplifier products range from milliwatts to up to 1,500 watts of output power from 1 to 2 microns in wavelength. We offer erbium-doped fiber amplifiers ("EDFAs"), Raman amplifiers and integrated communications systems that incorporate our amplifiers. These products are predominantly deployed in broadband networks such as fiber to the home ("FTTH"), fiber to the curb ("FTTC"), and passive optical networks ("PON"), and dense wavelength division multiplexing ("DWDM"), networks. We also offer ytterbium and thulium specialty fiber amplifiers and broadband light sources that are used in advanced applications. In addition, we sell single-frequency, linearly polarized and polarization-maintaining versions of our amplifier products. As with our fiber lasers, our fiber amplifiers offer some of the highest output power levels and highest number of optical outputs in the industry. We believe our line of fiber amplifiers offers the best commercially available output power and performance.

Systems

Besides selling laser sources, we also offer integrated laser systems for particular geographic markets or custom-developed for a customer's manufacturing requirements. Through our IPG Microsystems business, we offer industrial grade UV excimer, diode pumped solid state and pico-second laser micromachining systems and materials processing services. Key applications for these systems include advanced laser scribing and lift-off ("LLO") of light-emitting diodes ("LEDs"), thin film solar scribing, semiconductor, micro-electro-mechanical systems ("MEMS"), research, biomedical and industrial micromachining. IPG Microsystems' laser systems operate at wavelengths from 157nm to 1,064nm, and are essential to a growing set of today's industrial micromachining applications.

IPG also develops and sells specialized fiber laser systems for unique material processing applications as requested by customers desiring a complete laser-based solution, including remote welding, micro-welding and cutting. The platforms include multi-axis workstations for welding, flatbed cutters, and diode markers. Other systems offerings include a welding seam stepper and picker, which is an automated and integrated fiber laser welding tool providing customers increased processing speeds, better quality and the elimination of certain clamping tools. The seam stepper and picker, an alternative to resistance welding, are used in automotive assembly, sheet metal production and other materials processing applications.

The following table lists our principal product lines that generated a substantial majority of our revenues in 2012, and the principal applications markets in which they are used:

Product Line	Principal Markets	Principal Applications
High-Power Ytterbium CW (1,000 — 20,000 Watts)	Automotive Heavy Industry General Manufacturing Natural Resources Aerospace	• Cutting • Welding • Annealing • Drilling • Cladding • Brazing • Paint stripping
Mid-Power Ytterbium CW (100 — 999 Watts)	General Manufacturing Consumer Medical Devices Printing Microelectronics	• Cutting • Welding • Scribing • Engraving • Rapid prototyping
Pulsed Ytterbium (0.1 to 200 Watts)	General Manufacturing Semiconductor Medical Devices Consumer Microelectronics Panel Displays	• Marking • Engraving • Scribing • Drilling • Coating removal • Cutting
Pulsed and CW Green Lasers	Semiconductor Solar General Manufacturing	• Annealing silicon wafers • Thin film ablation • Marking plastics
Quasi-CW Ytterbium (100 — 900 Watts)	Medical Device Computer Components Micro-Processing	• Welding and micro-welding • Drilling • Cutting
Erbium Amplifiers	Broadband Access Cable TV DWDM Instrumentation Scientific Research	• Telephony • Video on demand • High-speed internet • Ultra-long-haul transmission • Beam combining

Our products are used in a broad range of applications. The major application is materials processing, comprising approximately 88% of our sales in 2012. Our products also address other applications, including advanced applications (approximately 7% of sales), communications (approximately 4% of sales) and medical (approximately 1% of sales).

Our Markets

Materials Processing

The most significant materials processing applications for fiber lasers are cutting and welding and marking and engraving. Other applications include micro-processing, surface treatment, drilling, soldering, annealing, hardening, rapid prototyping and laser-assisted machining.

Cutting and Welding Applications. Laser-based cutting technology has several advantages compared to alternative technologies. Laser cutting is fast, flexible and highly precise and can be used to cut complex contours on flat, tubular or three-dimensional materials. The laser source can be programmed to process many

different kinds of materials such as steel, aluminum, brass, copper, glass, ceramic and plastic at various thicknesses. Laser cutting technology is a non-contact process that is easy to integrate into an automated production line and is not subject to wear of the cutting medium. We sell low, mid and high-power ytterbium fiber lasers for laser cutting. High electrical efficiency, low maintenance and operating cost, high beam quality, wide operating power range, power stability and small spot size are some of the qualities offered by IPG fiber lasers for many cutting applications, which enable customers to cut a variety of materials faster.

Laser welding offers several important advantages compared to conventional welding technology as it is non-contact, easy to automate, provides high process speed and results in narrow-seamed, high-quality welds that generally require little or no post-processing machining. The high beam quality of our fiber lasers coupled with high CW power offer deep penetration welding as well as shallow conduction mode welding. In addition, fiber lasers can be focused to a small spot with extremely long focal lengths, enabling remote welding "on the fly," a flexible method of three-dimensional welding in which the laser beam is positioned by a robot-guided scanner. Such remote welding stations equipped with fiber lasers are used for welding door panels and seat backs, the multiple welding of spot and lap welds over the entire auto body frame and welding "body-in-white," which is welding pieces of metal with different thicknesses for automotive applications. Typically, mid to high-power ytterbium fiber lasers and long-pulse QCW ytterbium fiber lasers are used in welding applications. Our products are used also for laser brazing of visible joints in automobiles such as tailgates, roof joints and columns. Brazing is a method of connecting sheet metal.

Marking and Engraving. With the increasing need for source traceability, component identification and product tracking as a means of reducing product liability and preventing falsification, as well as the demand for modern robotic production systems, manufacturers increasingly demand marking systems capable of applying serialized alphanumeric, graphic or bar code identifications directly onto their manufactured components. Laser engraving is similar to marking but forms deeper grooves in the material. In contrast to conventional acid etching and ink-based technologies, lasers can mark a wide variety of metal and non-metal materials, such as ceramic, glass and plastic surfaces, at high speeds and without contact by changing the surface structure of the material or by engraving. Laser marking systems can be easily integrated into a customer's production process and do not subject the item being marked to mechanical stress. Our ytterbium pulsed fiber lasers are used for these applications.

In the semiconductor industry, lasers typically are used to mark wafers and integrated circuits. In the electronics industry, lasers typically are used to mark electrical components such as contactors, relays and printed circuit boards. Consumer electronic devices such as mobile phones, computers and handheld computers contain many parts that are laser-marked, including keyboards, logos and labels. With the increase in marking speed in the past few years, the cost of laser marking has decreased. In the photovoltaic or solar panel industry, pulsed lasers increasingly are used to remove materials and to scribe, or cut, solar cells. The high beam quality, increased peak output powers, flexible fiber delivery and competitive price of fiber lasers have accelerated the adoption of fiber lasers in these low-power applications.

Micro-Processing and Non-Metal Processing. The trend toward miniaturization in numerous industries such as consumer electronics, as well as innovations in materials and structures, is driving end users to utilize lasers in processing and fabrication. The ability of lasers to cut, weld, drill, ablate, etch and add materials on a fine scale is enabling new technologies and products across many industries. Our low-power CW and QCW lasers are used to cut medical stents and weld medical batteries. In photovoltaic manufacturing, our lasers etch and perform edge isolation processes. The aerospace industry requires precise manufacturing of engine parts so that cooling is effective and aerospace manufacturers use lasers to conduct percussive drilling. Processing of plastics and semi-conductors require short pulse and high energy lasers, in the green, UV and mid infra-red wavelengths.

Advanced Applications

Our fiber lasers and amplifiers are utilized by commercial firms and by academic and government institutions worldwide for manufacturing of commercial systems and for research in advanced technologies and products. These markets may use specialty products developed by us or commercial versions of our products.

Obstacle Warning and Mapping. Our products are used for obstacle warning and 3-dimensional mapping of earth surfaces.

Special Projects. Due to the high power, compactness, performance, portability, ruggedness and electrical efficiency of our fiber lasers and amplifiers, we sell our commercial products for government research and projects. These include materials testing, ordnance destruction, coherent beam combining, directed energy demonstrations, advanced communications and research.

Research and Development. Our products are used in a variety of applications for research and development by scientists and industrial researchers, including atom trapping. In addition, our lasers and amplifiers are used to design, test and characterize components and systems in a variety of markets and applications.

Optical Pumping and Harmonic Generation. Several types of our lasers are used to optically pump other solid-state lasers and for harmonic generation and parametric converters to support research in sensing, medical and other scientific research in the infrared and visible wavelength domains. Our lasers are used as a power source for these other lasers. Green visible lasers are used to pump titanium sapphire lasers. Visible lasers can be used in optical displays, planetariums and light shows.

Remote Sensing. Our products are used in light detection and ranging ("LIDAR"), a laser technique for remote sensing. Optical fiber can be used as a sensor for measuring changes in temperature, pressure and gas concentration in oil wells, atmospheric and pollution measurements and seismic exploration.

Communications

We design and manufacture a DWDM transport system with varying output power and wavelengths and a full range of fiber amplifiers and Raman pump lasers that enhance data transmission in broadband access and DWDM optical networks. We are leveraging our high-power diode and fiber technology through the qualification and sale of high-value integrated solutions for network suppliers.

DWDM. DWDM is a technology that expands the capacity of optical networks, allowing service providers to extend the life of existing fiber networks and reduce operating and capital costs by maximizing bandwidth capacity. We provide a broad range of high-power products for DWDM applications including EDFAs and Raman lasers. We provide a DWDM transport system that offers service providers and private network operators a simple, flexible, optical layer solution scalable to 80 channels that aggregates and multiplexes multiprotocol clients into optical transport network signals operating at 10, 40 and 100 gigabits per second per channel.

Broadband Access. The delivery to subscribers of television programming and Internet-based information and communication services is converging, driven by advances in Internet Protocol ("IP") technology and by changes in the regulatory and competitive environment. Fiber optic lines now offer connection speeds of up to 10 gigabits per second to the subscriber, or 1,000 times faster than digital subscriber lines ("DSL"), or cable links. We offer a series of specialty multi-port EDFAs and cable television ("TV") nodes and transmitters that support different types of passive optical network architectures, enabling high-speed data, voice, video on demand and high-definition TV. We provide an EDFA that supports up to 64 output ports, which allows service providers to support a high number of customers in a small space, reducing overall power consumption and network cost. End users for our products include communications network operators for video wavelength division multiplexing overlay solutions, operators of metro and long-haul networks for DWDM and amplification solutions, as well as cable and multiple system operators for optical amplification solutions.

Medical

We sell our commercial fiber and diode lasers to OEMs that incorporate our products into their medical laser systems. CW erbium and thulium fiber lasers from 1 to 150 watts and diode laser systems can be used in

various medical and biomedical applications. Aesthetic applications addressed by lasers include skin rejuvenation, skin resurfacing and stretch mark removal. Purchasers use our diode lasers in dental and skin tightening procedures. Surgical applications include prostate surgery. Fiber lasers have the ability to fine-tune optical penetration depth and absorption characteristics and can be used for ear, nose and throat, urology, gynecology and other surgical procedures.

Technology

Our products are based on our proprietary technology platform that we have developed and refined since our formation. The following technologies are key elements in our products.

Specialty Optical Fibers

We have extensive expertise in the disciplines and techniques that form the basis for the multi-clad active and passive optical fibers used in our products. Active optical fibers form the laser cavity or gain medium in which lasing or amplification of light occurs in our products. Passive optical fibers deliver the optical energy created in our products. Our active fibers consist of an inner core that is infused with the appropriate rare earth ion, such as ytterbium, erbium or thulium, and outer cores of un-doped glass having different indices of refraction. We believe that our large portfolio of specialty active and passive optical fibers has a number of advantages as compared to other commercially available optical fibers. These advantages include higher concentrations of rare earth ions, fibers that will not degrade at the high power levels over the useful life of the product, high lasing efficiency, ability to achieve single-mode outputs at high powers, ability to withstand high optical energies and temperatures and scalable side-pumping capability.

Semiconductor Diode Laser Processing and Packaging Technologies

Another key element of our technology platform is that we use multiple multi-mode, or broad area, single-emitter diodes rather than diode bars or stacks as a pump source. We believe that multi-mode single-emitter diodes are the most efficient and reliable pumping source presently available, surpassing diode bars and stacks in efficiency, brightness and reliability. Single-emitter diodes have substantially reduced cooling requirements and typically have estimated lifetimes of more than 100,000 hours at high operating currents, compared to typical lifetimes of up to 10,000 to 20,000 hours for diode bars.

We developed advanced molecular beam epitaxy techniques to grow alumina indium gallium arsenide wafers for our diodes. This method yields high-quality optoelectronic material for low-defect density and high uniformity of optoelectronic parameters. In addition, we have developed numerous proprietary wafer processes and testing and qualification procedures in order to create a high energy output in a reliable and high-power diode. We package our diodes in hermetically sealed pump modules in which the diodes are combined with an optical fiber output. Characteristics such as the ability of the package to dissipate heat produced by the diode and withstand vibration, shock, high temperature, humidity and other environmental conditions are critical to the reliability and efficiency of the products.

Specialty Components and Combining Techniques

We developed a wide range of advanced optical components that are capable of handling high optical power levels and contribute to the superior performance, efficiency and reliability of our products. In addition to fibers and diodes, our optical component portfolio includes fiber gratings, couplers, isolators and combiners. We also developed special methods and expertise in splicing fibers together with low optical energy loss and on-line loss testing. We believe that our internal development and manufacturing of key optical components allows us to lower our manufacturing costs and improve product performance.

Side Pumping of Fibers and Fiber Block Technologies

Our technology platform allows us to efficiently combine a large number of multi-mode single-emitter semiconductor diodes with our active optical fibers that are used in all of our products. A key element of this

technology is that we pump our fiber lasers through the cladding surrounding the active core. We splice our specialty active optical fibers with other optical components and package them in a sealed box, which we call a fiber block. The fiber blocks are compact and eliminate the risk of contamination or misalignment due to mechanical vibrations and shocks as well as temperature or humidity variations. Our design is scalable and modular, permitting us to make products with high output power by coupling a large number of diodes with fiber blocks, which can be combined in parallel and serially.

High-Stress Testing

We employ high-stress techniques in testing components and final products that help increase reliability and accelerate product development. For example, we test all of our diodes with high current and temperatures to accelerate aging. We also have built a large database of diode test results that allows us to predict the estimated lifetime of our diodes. This testing allows us to eliminate defective diodes prior to further assembly and thus increase reliability.

Customers

We sell our products globally to OEMs, system integrators and end users in a wide range of diverse markets who have the in-house engineering capability to integrate our products into their own systems. We have thousands of customers worldwide. Our primary end market is materials processing, comprised of general manufacturing, automotive, heavy industry, aerospace, consumer products, medical device manufacturing, natural resources, photovoltaic semiconductor and electronics customers. We also sell our products to other end markets, including advanced applications (comprised of commercial companies, universities, research entities and government entities), communications (comprised of system integrators, utilities and municipalities) and medical (comprised of medical laser systems manufacturers and researchers). We believe that our customer and end-market diversification minimizes dependence on any single industry or group of customers.

The following table shows the allocation of our net sales (in thousands) among our principal markets:

	Year Ended December 31,					
	2012		2011		Change	
		% of Total		% of Total		
Materials Processing	$492,013	87.5%	$419,443	88.4%	$72,570	17.3%
Other applications:						
Advanced Applications	43,052	7.6	25,918	5.5	17,134	66.1
Communications	21,706	3.9	20,368	4.3	1,338	6.6
Medical	5,757	1.0	8,753	1.8	(2,996)	34.2
Total other applications:	70,515	12.5	55,039	11.6	15,476	28.1
Total	$562,528	100.0%	$474,482	100.0%	$88,046	18.6%

None of our customers accounted for 10% or more of our net sales for the years ended December 31, 2012, 2011 or 2010.

Our net sales (in thousands) were derived from customers in the following geographic regions:

	Year Ended December 31,					
	2012		2011		2010	
North America(1)	$108,316	19.3%	$ 86,181	18.2%	$ 61,706	20.6%
Europe	200,708	35.7	179,584	37.8	112,456	37.6
Asia and Australia	251,803	44.8	204,758	43.2	124,254	41.5
Rest of World	1,701	0.3	3,959	0.8	840	0.3
Total	$562,528	100.0%	$474,482	100.0%	$299,256	100.0%

(1) The substantial majority of sales in North America are to customers in the United States.

Backlog

At December 31, 2012, our backlog of orders (generally scheduled for shipment within one year) was approximately $203.0 million compared to $207.0 million at December 31, 2011. At December 31, 2012, our backlog included $102.0 million of orders with firm shipment dates and $101.0 million of frame agreements that we expect to ship within one year, compared to $124.1 million of orders with firm shipment dates and $82.9 million of frame agreements at December 31, 2011. Frame agreements generally are agreements without committed shipment dates. Orders used to compute backlog are generally cancelable without substantial penalties. Historically, the rate of cancellation experienced by us has not been significant. We manage the risk of cancellation by establishing the right to charge a cancellation fee that generally covers a portion of the purchase price, any materials and development costs incurred prior to the order being cancelled. Our ability to enforce this right depends on many factors including, but not limited to, the customer's requested length of delay, the number of other outstanding orders with the customer and our ability to quickly convert the cancelled order to another sale.

We anticipate shipping a substantial majority of the present backlog during fiscal year 2013. However, our backlog at any given date is not necessarily indicative of actual sales for any future period.

Sales, Marketing and Support

We market our products internationally primarily through our direct sales force. Our direct sales force sells to end users, OEMs and systems integrators. Once our fiber laser products are designed into an OEM system, the OEM's sales force markets its systems, allowing us to take advantage of numerous OEMs sales forces, each typically having several sales persons in locations other than where our sales offices are located. We have sales offices in the United States, Germany, Italy, Turkey, the United Kingdom, France, Spain, China, Japan, South Korea, Singapore, India and Russia. We have materials processing application centers in the United States, Germany, Russia, China, Italy, Japan and South Korea, which we use to demonstrate our products and develop new applications. Our application centers are fundamental to developing new laser applications for customers and assisting them in integrating lasers into their production processes.

To a lesser extent, we market through agreements with independent sales representatives and distributors. Sales to foreign customers are generally priced in local currencies and are therefore subject to currency exchange fluctuations.

We maintain a customer support and field service staff in our major markets. We work closely with customers and independent representatives to service equipment and to train customers to use our products. We have expanded our support and field service, particularly in locations where customer concentration or volume requires local service capabilities. We repair products at our facilities or at customer sites.

We typically provide one to three-year parts and service warranties on our lasers and amplifiers. Most of our sales offices provide support to customers in their respective geographic areas. Warranty reserves have generally been sufficient to cover product warranty repair and replacement costs.

Manufacturing

Vertical integration is one of our core business strategies through which we control our proprietary processes and technologies as well as the supply of key components and assemblies. We believe that our vertically integrated business model gives us the following advantages:

- maintaining a technological lead over competitors;
- reducing component and final product costs compared to market prices available to competitors;
- ensuring access to critical components, enabling us to better meet customer demands;

- controlling performance, quality and consistency; and
- enabling rapid development and deployment of new products and technologies.

Our vertically integrated manufacturing operations include optical preform making, specialty fiber drawing, semiconductor wafer growth, diode processing and packaging, specialty optical component manufacturing, fiber block and fiber module assembly for different power units, software and electronics development, final assembly, as well as testing, tool manufacturing and automated production systems. Over the last several years, we added additional production capabilities, including three multi-wafer growth reactors, diode test stations, fiber pre-form and fiber drawing equipment and low, mid and high-power production and testing, in order to increase our capacity as well as reduce the risks associated with our production process.

We operate our own semiconductor foundry for the production of the multi-mode single-emitter diodes. Diodes are the pumps that are used as the light source in each device we make. We also process, package and extensively test all of our diodes. Because pump diodes represent a significant component cost of the final laser or amplifier, we have chosen to develop internal manufacturing capabilities for diodes. As a result of our high-volume production levels of pump diodes, proprietary processes and use of limited chip designs, we have been able to increase yields, lower component costs and assure high quality. We also design, manufacture and optimize many of our own test instruments, diode test racks, robotic and automated assembly tools and machines.

We developed these proprietary components, manufacturing tools, equipment and techniques over many years in an effort to address the major issues that had been inhibiting the development of fiber laser technology and to provide products that differentiate us from our competitors. We believe that the proprietary components, manufacturing tools, equipment, techniques and software utilized in all of our product lines provide extensive barriers to potential competitors. Generally, we do not sell our proprietary components to third parties in material quantities. Using our technology platform, we configure standard products based upon each customer's specifications. Through our vertically integrated manufacturing operations, we can develop, test and produce new products and configurations with higher performance and reliability and in less time than by working with external vendors. We have developed proprietary testing methodologies that allow us to develop higher power components and products in short periods of time, enable us to introduce products to the market more quickly, capitalize on new opportunities and provide superior service to our customers.

Our in-house manufacturing generally includes only those operations and components that are critical to the protection of our intellectual property, the reduction of our costs or the achievement of performance and quality standards. We purchase from vendors common and specialized mechanical, electrical and optical parts and raw materials, such as printed circuit boards, wafer substrates and various optical components.

Research and Development

We have extensive research and development experience in laser materials, fiber and optoelectronic components. We have assembled a team of scientists and engineers with specialized experience and extensive knowledge in fiber lasers and amplifiers, critical components, testing and manufacturing process design.

We focus our research and development efforts on designing and introducing new and improved standard and customized products and the mass production of components for our products. In addition to our cladding-pumped specialty fiber platform, we have core competencies in high-power multi-mode semiconductor laser diodes, diode packaging, specialty active and passive optical fibers, high-performance optical components, fiber gain blocks and fiber modules, as well as splicing and combining techniques and high-stress test methods. Our research and development efforts are aided by our vertical integration and our proprietary high-stress testing techniques that result in accelerated development cycles. The strategy of developing our proprietary components has allowed us to leverage our optical experience and large volume requirements to lower the cost of our products. We concentrate our research and development efforts on advancements in performance as well as capacity to hold and produce higher optical power levels.

Our research and development efforts are also directed at expanding our product line by increasing power levels, improving beam quality and electrical efficiency, decreasing the size of our products and lowering the cost per watt. We also are engaged in research projects to expand the spectral range of products that we offer, including the development of UV pulsed fiber lasers, ultra-fast pulsed fiber lasers, and a mid-infrared ("IR") line of lasers from 2 to 5 microns, with a hybrid fiber and crystal laser design. Our team of experienced scientists and engineers works closely with many of our customers to develop and introduce custom products that address specific applications and performance requirements.

We incurred research and development costs of approximately $31.4 million, $25.4 million and $19.2 million for the years ended December 31, 2012, 2011 and 2010, respectively. We plan to continue our commitment to research and development and to introduce new products, systems and complementary products that would allow us to maintain our competitive position. See Item 7, "Management's Discussion and Analysis of Financial Condition of Results of Operations."

Intellectual Property

We seek to protect our proprietary technology primarily through the U.S. and foreign laws affording protection for trade secrets, and to seek U.S. and foreign patent, copyright and trademark protection of our products and processes where appropriate. Historically, we relied primarily on trade secrets, technical know-how and other unpatented proprietary information relating to our product development and manufacturing activities. We seek to protect our trade secrets and proprietary information, in part, by requiring our employees to enter into agreements providing for the maintenance of confidentiality and the assignment to us of rights to inventions that they make while we employ them. We also enter into non-disclosure agreements with our consultants and suppliers to protect confidential information delivered to them. We believe that our vertical integration, including our long experience in making a wide range of specialty and high-power capacity components, as well as our technology platform make it difficult for others to reverse engineer our products.

We have increased our efforts to expand our patent portfolio globally. As of February 28, 2013, we have over 140 patents issued and over 180 pending patent applications worldwide relating principally to optical fiber lasers, amplifiers, bulk optics, semiconductors, and laser and telecommunications systems. With respect to the United States, we were issued 18 patents and we filed 23 applications on new subject matter in 2012. In February 2008, we purchased a portfolio of photonics patents from British Telecommunications plc in the fields of optical fiber lasers and amplifiers, semiconductor devices, integrated optics, fiber gratings, high-speed systems and optical networking. Intellectual property rights, including those that we own, those that we license and those of others, involve significant risks. See Item 1A, "Risk Factors-Our Inability to Protect Our Intellectual Property and Proprietary Technologies Could Result in the Unauthorized Use of Our Technologies by Third Parties, Hurt Our Competitive Position and Adversely Affect Our Operating Results."

Competition

Our markets are competitive and characterized by rapidly changing technology and continuously evolving customer requirements. We believe that the primary competitive factors in our markets are:

- product performance and reliability;
- quality and service support;
- price and value to the customer;
- ability to manufacture and deliver products on a timely basis;
- ability to achieve qualification for and integration into OEM systems;
- ability to meet customer specifications; and
- ability to respond quickly to market demand and technological developments.

We believe we compete favorably with respect to these criteria. In the materials processing market, the competition is fragmented and includes a large number of competitors. We compete with makers of high-power CO_2, YAG and disc lasers, including Fanuc, Rofin-Sinar Technologies, Inc. and Trumpf GmbH + Co. KG, makers of mid and low-power CO_2, solid-state lasers such as Coherent, Inc., GSI Group Inc., Newport Corporation and Rofin-Sinar Technologies, Inc., and direct diode lasers such as Laserline GmbH. We also compete with fiber laser makers, including Rofin-Sinar Technologies, Inc., Trumpf GmbH + Co. KG, GSI Group Inc., Coherent Inc., Hypertherm, Inc., Newport Corporation, The Furukawa Electric Co., Ltd., Keopsys SA, Mitsubishi Cable Industries, Ltd., Miyachi Unitek Corporation, Raycus Fiber Laser Technologies Co. Ltd., Maxphotonics Co., Ltd. and JDS Uniphase Corporation. Several competitors recently introduced fiber lasers or announced plans to introduce fiber lasers that compete with our high-power products. We believe that we compete favorably with other makers of fiber lasers on price and value to customer, reliability, service and performance.

We also compete in the materials processing, advanced and medical applications markets with end users that produce their own solid-state and gas lasers as well as with manufacturers of non-laser methods and tools, such as resistance welding and cutting dies in the materials processing market and scalpels in the medical market.

In the communications market, our principal competitors are manufacturers of mid-power fiber amplifiers and DWDM systems, such as Oclaro Inc., the Scientific-Atlanta division of Cisco Systems, Inc. (Scientific-Atlanta), Emcore Corporation, JDS Uniphase Corporation and MPB Communications Inc. The fiber amplifier market is more established than the fiber laser market and technological change has not occurred as rapidly as it has in the case of fiber lasers. We believe that we compete favorably with other high-power fiber amplifier producers with respect to price, product performance and output power.

Many of our competitors are larger than we are and have substantially greater financial, managerial and technical resources, more extensive distribution and service networks, greater sales and marketing capacity, and larger installed customer bases than we do.

Employees

As of December 31, 2012, we had approximately 2,400 full-time employees, including 260 in research and development, 1,840 in manufacturing operations, 110 in sales, service and marketing, and 190 in general and administrative functions. Of our total full-time employees at our principal facilities, approximately 720 were in the United States, 710 were in Germany, 670 were in Russia and 90 were in China. We have never experienced a work stoppage and none of our employees is subject to a collective bargaining agreement. We believe that our current relations with our employees are good.

Government Regulation

Regulatory Compliance

The majority of our laser and amplifier products sold in the United States are classified as Class IV Laser Products under the applicable rules and regulations of the Center for Devices and Radiological Health ("CDRH") of the U.S. Food and Drug Administration ("FDA"). The same classification system is applied in the European markets. Safety rules are formulated with "Deutsche Industrie Norm" (i.e., German Industrial Standards) or International Organization for Standardization ("ISO") standards, which are internationally harmonized.

CDRH regulations generally require a self-certification procedure pursuant to which a manufacturer must submit a filing to the CDRH with respect to each product incorporating a laser device, make periodic reports of sales and purchases and comply with product labeling standards, product safety and design features and informational requirements. The CDRH is empowered to seek fines and other remedies for violations of their requirements. We believe that our products are in material compliance with applicable laws and regulations relating to the manufacture of laser devices.

Environmental Regulation

Our operations are subject to various federal, state, local and international laws governing the environment, including those relating to the storage, use, discharge, disposal, product composition and labeling of, and human exposure to, hazardous and toxic materials. We believe that our operations are in material compliance with applicable environmental protection laws and regulations. Although we believe that our safety procedures for using, handling, storing and disposing of such materials comply with the standards required by federal and state laws and regulations, we cannot completely eliminate the risk of accidental contamination or injury from these materials. In the event of such an accident involving such materials, we could be liable for damages and such liability could exceed the amount of our liability insurance coverage and the resources of our business.

Availability of Reports

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to such reports are available free of charge on our web site at www.ipgphotonics.com as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the Securities and Exchange Commission ("SEC") (www.sec.gov). We will also provide electronic or paper copies of such reports free of charge, upon request made to our Corporate Secretary.

ITEM 1A. *RISK FACTORS*

The factors described below are the principal risks that could materially adversely affect our operating results and financial condition. Other factors may exist that we do not consider significant based on information that is currently available. In addition, new risks may emerge at any time, and we cannot predict those risks or estimate the extent to which they may affect us.

Downturns in the markets we serve, particularly materials processing, could have a material adverse effect on our sales and profitability.

Our business depends substantially upon capital expenditures by our customers, particularly by manufacturers in the materials processing market, which includes general manufacturing, automotive, marking, electronics and photovoltaic applications. Approximately 88% of our revenues in 2012 were from customers in the materials processing market. Although applications in this market are broad, sales for these applications are cyclical and have historically experienced sudden and severe downturns and periods of oversupply, resulting in significantly reduced demand for capital equipment, including the products that we manufacture and market. For example, our sales decreased by 25% in the materials processing market in 2009 as a result of the global economic recession. For the foreseeable future, our operations will continue to depend upon capital expenditures by customers in this market, which, in turn, depend upon the demand for their products or services. Decreased demand for products and services from customers for these applications during an economic downturn may lead to decreased demand for our products, which would reduce our sales and margins. We may not be able to respond by decreasing our expenses quickly enough, due in part, to our fixed overhead structure related to our vertically integrated operations and our commitments to continuing investment in research and development.

Uncertainty and adverse changes in the general economic conditions of markets in which we participate negatively affect our business.

Current and future conditions in the economy have an inherent degree of uncertainty. As a result, it is difficult to estimate the level of growth or contraction for the economy as a whole. It is even more difficult to estimate growth or contraction in various parts, sectors and regions of the economy, including the materials processing, telecommunications, advanced and medical markets and applications in which we participate. Because all components of our budgeting and forecasting are dependent upon estimates of growth or contraction in the markets and applications we serve and demand for our products, the prevailing economic uncertainties

render estimates of future income and expenditures very difficult to make. Our sales have benefited in 2012, 2011 and 2010 from our increased sales of mid and high-power lasers to end users in China. A slowing of economic growth, or a recession in China, would slow our growth rates or may result in a decrease in our sales. Adverse changes have occurred and may occur in the future as a result of declining or flat global or regional economic conditions, fluctuations in currency and commodity prices, wavering confidence, capital expenditure reductions, unemployment, declines in stock markets, contraction of credit availability, declines in real estate values, or other factors affecting economic conditions generally. These changes may negatively affect the sales of our lasers and amplifiers, increase exposure to losses from bad debts, increase the cost and decrease the availability of financing, increase the risk of loss on investments, or increase costs associated with manufacturing and distributing products. A prolonged economic downturn could have a material adverse effect on our business, financial condition and results of operations.

Our sales depend upon our ability to penetrate new applications for fiber lasers and increase our market share in existing applications.

Our level of sales will depend on our ability to generate sales of fiber lasers in applications where conventional lasers, such as CO_2 and YAG lasers, have been used or in new and developing markets and applications for lasers where they have not been used previously. To date, a significant portion of our revenue growth has been derived from sales of fiber lasers primarily for applications where CO_2 and YAG lasers historically have been used. In order to maintain or increase market demand for our fiber laser products, we will need to devote substantial resources to:

- demonstrate the effectiveness of fiber lasers in new applications;
- increase our direct and indirect sales efforts;
- effectively service and support our installed product base on a global basis;
- extend our product line to address new applications for our products; and
- continue to reduce our manufacturing costs and enhance our competitive position.

If we are unable to implement our strategy to develop new applications for our products, our revenues, operating results and financial condition could be adversely affected. We cannot assure you that we will be able to successfully implement our business strategy. In addition, our newly developed or enhanced products may not achieve market acceptance or may be rendered obsolete or less competitive by the introduction of new products by other companies.

If fiber lasers do not achieve broader market acceptance or if market penetration occurs more slowly than we expect, sales and profitability may be negatively impacted.

Fiber lasers are relatively new when compared to conventional lasers and our future success depends on the development and broader acceptance of fiber lasers. Potential customers may be reluctant to adopt fiber lasers as an alternative to conventional lasers, such as CO_2 and YAG, and non-laser methods, such as mechanical tools. Such potential customers may have substantial investments and know-how related to their existing laser and non-laser technologies, and may perceive risks relating to the reliability, quality, usefulness and cost-effectiveness of fiber lasers when compared to other laser or non-laser technologies available in the market. Many of our target markets, such as the automotive, machine tool and other manufacturing, communications and medical industries, have historically adopted new technologies slowly. These markets often require long test and qualification periods or lengthy government approval processes before adopting new technologies. As a result, we may expend significant resources and time to qualify our products for a new customer application, and we cannot assure that our products will be qualified or approved for such markets. If acceptance of fiber laser technology and of our fiber lasers in particular does not continue to grow within the markets that we serve, then the opportunities to maintain or increase our revenues and profitability may be severely limited.

Our vertically integrated business results in high levels of fixed costs and inventory levels that may adversely impact our gross profits and our operating results in the event that demand for our products declines or we maintain excess inventory levels.

We have a high fixed cost base due to our vertically integrated business model, including the fact that approximately 76% of our approximately 2,400 employees as of December 31, 2012 were employed in our manufacturing operations. We may not adjust these fixed costs quickly enough to adapt to rapidly changing market conditions. Our gross profit, in absolute dollars and as a percentage of net sales, is impacted by our sales volume, the corresponding absorption of fixed manufacturing overhead expenses and manufacturing yields. In addition, because we are a vertically integrated manufacturer and design and manufacture our key specialty components, insufficient demand for our products may subject us to the risks of high inventory carrying costs and increased inventory obsolescence. If our capacity and production levels are not properly sized in relation to expected demand, we may need to record write-downs for excess or obsolete inventory. Because we are vertically integrated, the rate at which we turn inventory has historically been low when compared to our cost of sales. We do not expect this to change significantly in the future and believe that we will have to maintain a relatively high level of inventory compared to our cost of sales. As a result, we continue to expect to have a significant amount of working capital invested in inventory. Changes in our level of inventory lead to an increase in cash generated from our operations when inventory is sold or a decrease in cash generated from our operations at times when the amount of inventory increases.

Our manufacturing capacity and operations may not be appropriate for future levels of demand and may adversely affect our gross margins.

We have added and are continuing to add substantial manufacturing capacity at our facilities in the United States, Germany and Russia. A significant portion of our manufacturing facilities and production equipment, such as our semiconductor production and processing equipment, diode packaging equipment and diode burn-in stations, are special-purpose in nature and cannot be adapted easily to make other products. If the demand for fiber lasers or amplifiers does not increase or if our revenue decreases from current levels, we may have significant excess manufacturing capacity and under-absorption of our fixed costs, which could in turn adversely affect our gross margins and profitability.

To maintain our competitive position as the leading developer and manufacturer of fiber lasers and to meet anticipated demand for our products, we invest significantly in the expansion of our manufacturing and operations throughout the world and may do so in the future. We incurred in the past and will incur in the future significant costs associated with the acquisition, build-out and preparation of our facilities. We had capital expenditures of $68.2 million and $53.0 million in 2012 and 2011, respectively, and we expect to incur approximately $60 million to $70 million in capital expenditures, excluding acquisitions, in 2013. In connection with these projects, we may incur cost overruns, construction delays, labor difficulties or regulatory issues which could cause our capital expenditures to be higher than what we currently anticipate, possibly by a material amount, which would in turn adversely impact our operating results. Moreover, we may experience higher costs due to yield loss, production inefficiencies and equipment problems until any operational issues associated with the opening of new manufacturing facilities are resolved.

The markets for our products are highly competitive and increased competition could increase our costs, reduce our sales or cause us to lose market share.

The industries in which we operate are characterized by significant price and technological competition. Our fiber laser and amplifier products compete with conventional laser technologies and amplifier products offered by several well-established companies, some of which are larger and have substantially greater financial, managerial and technical resources, more extensive distribution and service networks, greater sales and marketing capacity, and larger installed customer bases than we do. Also, we compete with widely used non-laser production methods, such as resistance welding. We believe that competition will be particularly intense from

makers of CO_2, YAG, disc and direct diode lasers, as these makers of conventional solutions may lower prices to maintain current market share and have committed significant research and development resources to pursue opportunities related to these technologies.

In addition, we face competition from a growing number of fiber laser makers, including Rofin-Sinar Technologies, Inc., Trumpf GmbH + Co. KG, GSI Group Inc., Coherent Inc., Hypertherm, Inc., Newport Corporation, The Furukawa Electric Co., Ltd., Keopsys SA, Mitsubishi Cable Industries, Ltd., Miyachi Unitek Corporation, Raycus Fiber Laser Technologies Co. Ltd., Maxphotonics Co., Ltd. and JDS Uniphase Corporation. Competition from other fiber laser makers has increased and some have introduced fiber lasers or announced plans to introduce fiber lasers that compete with our products. We may not be able to successfully differentiate our current and proposed products from our competitors' products and current or prospective customers may not consider our products to be superior to competitors' products. To maintain our competitive position, we believe that we will be required to continue a high level of investment in research and development, application development and customer service and support, and to react to market pricing conditions. We may not have sufficient resources to continue to make these investments and we may not be able to make the technological advances or price adjustments necessary to maintain our competitive position. We also compete against our OEM customers' internal production of competitive laser technologies.

The laser and amplifier industries are experiencing declining average selling prices, which could cause our gross margins to decline and harm our operating results.

Products in the laser and amplifier industries generally, and our products specifically, are experiencing and may in the future continue to experience a decline in average selling prices ("ASPs") as a result of new product and technology introductions, increased competition and price pressures from significant customers. If the ASPs of our products decline further and we are unable to increase our unit volumes, introduce new or enhanced products with higher margins or reduce manufacturing costs to offset anticipated decreases in the prices of our existing products, our operating results may be adversely affected. In addition, because of our significant fixed costs, we are limited in our ability to reduce total costs quickly in response to any revenue shortfalls. Because of these factors, we have experienced and we may experience in the future material adverse fluctuations in our operating results on a quarterly or annual basis if the ASPs of our products continue to decline.

We have experienced, and expect to experience in the future, fluctuations in our quarterly operating results. These fluctuations may increase the volatility of our stock price.

We have experienced, and expect to continue to experience, fluctuations in our quarterly operating results. We believe that fluctuations in quarterly results may cause the market price of our common stock to fluctuate, perhaps substantially. Factors which may have an influence on our operating results in a particular quarter include:

- the increase, decrease, cancellation or rescheduling of significant customer orders;
- the timing of revenue recognition based on the installation or acceptance of certain products shipped to our customers;
- seasonality attributable to different purchasing patterns and levels of activity throughout the year in the areas where we operate;
- the timing of customer qualification of our products and commencement of volume sales of systems that include our products;
- our ability to obtain export licenses for our products on a timely basis or at all;
- the rate at which our present and future customers and end users adopt our technologies;

- the gain or loss of a key customer;
- product or customer mix;
- competitive pricing pressures;
- our ability to design, manufacture and introduce new products on a cost-effective and timely basis;
- our ability to manage our inventory levels and any inventory write-downs;
- the incurrence of expenses to develop and improve application and support capabilities, the benefits of which may not be realized until future periods, if at all;
- different capital expenditure and budget cycles for our customers, which affect the timing of their spending;
- foreign currency fluctuations; and
- our ability to control expenses.

These factors make it difficult for us to accurately predict our operating results. In addition, our ability to accurately predict our operating results is complicated by the fact that many of our products have long sales cycles, some lasting as long as twelve months. Once a sale is made, our delivery schedule typically ranges from four weeks to four months, and therefore our sales will often reflect orders shipped in the same quarter that they are received and will not enhance our ability to predict our results for future quarters. In addition, long sales cycles may cause us to incur significant expenses without offsetting revenues since customers typically expend significant effort in evaluating, testing and qualifying our products before making a decision to purchase them. Moreover, customers may cancel or reschedule shipments, and production difficulties could delay shipments. Accordingly, our results of operations are subject to significant fluctuations from quarter to quarter, and we may not be able to accurately predict when these fluctuations will occur.

We may pursue acquisitions and investments in new businesses, products, patents or technologies. These may involve risks which could disrupt our business and may harm our financial condition.

We currently have no binding commitments or agreements to make any acquisitions and have limited experience in making acquisitions. In the future, we may make acquisitions of and investments in new businesses, products, patents and technologies and expand into new geographic areas, or we may acquire operations, products or technologies that expand our current capabilities. Acquisitions present a number of potential risks and challenges that could, if not met, disrupt our business operations, increase our operating costs and reduce the value of the acquired company, asset or technology to us. For example, if we identify an acquisition candidate, we may not be able to successfully negotiate or finance the acquisition on favorable terms. Even if we are successful, we may not be able to integrate the acquired businesses, products, patents or technologies into our existing business and products. As a result of the rapid pace of technological change in our industry, we may misjudge the long-term potential of an acquired business, product, patent or technology, or the acquisition may not be complementary to our existing business. Furthermore, potential acquisitions and investments, whether or not consummated, may divert our management's attention and require considerable cash outlays at the expense of our existing operations. In addition, to complete future acquisitions, we may issue equity securities, incur debt, assume contingent liabilities or have amortization expenses and write-downs of acquired assets, which could adversely affect our profitability and result in dilution to our existing and future stockholders.

Because we lack long-term purchase commitments from our customers, our sales can be difficult to predict, which could lead to excess or obsolete inventory and adversely affect our operating results.

We generally do not enter into long-term agreements with our customers obligating them to purchase our fiber lasers or amplifiers. Our business is characterized by short-term purchase orders and shipment schedules

and, in some cases, orders may be cancelled or delayed without significant penalty. As a result, it is difficult to forecast our revenues and to determine the appropriate levels of inventory required to meet future demand. In addition, due to the absence of long-term volume purchase agreements, we forecast our revenues and plan our production and inventory levels based upon the demand forecasts of our OEM customers, end users and distributors, which are highly unpredictable and can fluctuate substantially. This could lead to increased inventory levels and increased carrying costs and risk of excess or obsolete inventory due to unanticipated reductions in purchases by our customers. In this regard, we recorded provisions for slow-moving, obsolete or excess inventory totaling $8.2 million, $6.1 million and $2.7 million in 2012, 2011 and 2010, respectively. These provisions were recorded as a result of changes in market prices of certain components, the value of those inventories that was realizable through finished product sales and uncertainties related to the recoverability of the value of inventories due to technological changes and excess quantities. If our OEM customers, end users or distributors fail to accurately forecast the demand for our products, fail to accurately forecast the timing of such demand, or are unable to consistently negotiate acceptable purchase order terms with customers, our results of operations may be adversely affected.

We rely on the significant experience and specialized expertise of our senior management and scientific staff and if we are unable to retain these key employees and attract other highly skilled personnel necessary to grow our business successfully, our business and results of operations could suffer.

Our future success is substantially dependent on the continued service of our executive officers, particularly our founder and chief executive officer, Dr. Valentin P. Gapontsev, age 74, and the managing director of our German subsidiary IPG Laser GmbH and Senior Vice-President, Europe, Dr. Eugene Scherbakov, age 65, our highly trained team of scientists, many of whom have numerous years of experience and specialized expertise in optical fibers, semiconductors and optical component technology, and other key engineering, sales, marketing, manufacturing and support personnel, any of whom may leave, which could harm our business. The members of our scientific staff who are expected to make significant individual contributions to our business are also members of our executive management team as disclosed under Item 10, "Directors, Executive Officers and Corporate Governance" below. Furthermore, our business requires scientists and engineers with experience in several disciplines, including physics, optics, materials sciences, chemistry and electronics. We will need to continue to recruit and retain highly skilled scientists and engineers for certain functions. Our future success also depends on our ability to identify, attract, hire, train, retain and motivate highly skilled research and development, managerial, operations, sales, marketing and customer service personnel. If we fail to attract, integrate and retain the necessary personnel, our ability to extend and maintain our scientific expertise and grow our business could suffer significantly.

We are subject to litigation alleging that we are infringing third-party intellectual property rights. Intellectual property claims could result in costly litigation and harm our business.

In recent years, there has been significant litigation involving intellectual property rights in many technology-based industries, including our own. We face risks and uncertainties in connection with such litigation, including the risk that patents issued to others may harm our ability to do business; that there could be existing patents of which we are unaware that could be pertinent to our business; and that it is not possible for us to know whether there are patent applications pending that our products might infringe upon, since patent applications often are not disclosed until a patent is issued or published. Moreover, the frequency with which new patents are granted and the diversity of jurisdictions in which they are granted make it impractical and expensive for us to monitor all patents that may be relevant to our business.

From time to time, we have been notified of allegations and claims that we may be infringing patents or intellectual property rights owned by third parties. In 2007, we settled two patent infringement lawsuits filed against us and in 2010 we settled another patent infringement lawsuit filed against us. Following a federal jury trial in 2011, we won a patent infringement lawsuit asserted by IMRA America, Inc. in 2006 alleging that certain products we produce infringe one U.S. patent allegedly owned by IMRA America. IMRA America has also

informed us that it has patents and applications in the United States and in foreign jurisdictions directed to fiber lasers and fiber amplifiers, but has not asserted them against us. We are engaged in opposition proceedings in Japan and Germany with respect to two patents allegedly owned by IMRA America related to the patent IMRA America asserted against us in the United States. In Japan, the patent office invalidated two claims, and subsequently the Japanese IP High Court concluded that the remaining 49 claims of an IMRA America patent were invalid. IMRA is appealing the IP High Court decision. The German Patent and Trademark Office concluded that IMRA's claims corresponding to its original patent request and several auxiliary requests were not patentable and found that claims relating to IMRA's final auxiliary request were patentable. We are appealing a portion of this decision favorable to IMRA.

There can be no assurance that we will be able to dispose without a material effect any claims or other allegations made or asserted in the future. The outcome of any litigation is uncertain. Even if we ultimately are successful on the merits of any such litigation or re-examination, legal and administrative proceedings related to intellectual property are typically expensive and time-consuming, generate negative publicity and divert financial and managerial resources. Some litigants may have greater financial resources than we have and may be able to sustain the costs of complex intellectual property litigation more easily than we can.

If we do not prevail in any intellectual property litigation brought against us, it could affect our ability to sell our products and materially harm our business, financial condition and results of operations. These developments could adversely affect our ability to compete for customers and increase our revenues. Plaintiffs in intellectual property cases often seek, and sometimes obtain, injunctive relief. Intellectual property litigation commenced against us could force us to take actions that could be harmful to our business, competitive position, results of operations and financial condition, including the following:

- stop selling our products or using the technology that contains the allegedly infringing intellectual property;
- pay actual monetary damages, royalties, lost profits or increased damages and the plaintiff's attorneys' fees, which individually or in the aggregate may be substantial; and
- attempt to obtain a license to use the relevant intellectual property, which may not be available on reasonable terms or at all.

In addition, intellectual property lawsuits can be brought by third parties against OEMs and end users that incorporate our products into their systems or processes. In some cases, we indemnify OEMs against third-party infringement claims relating to our products and we often make representations affirming, among other things, that our products do not infringe the intellectual property rights of others. As a result, we may incur liabilities in connection with lawsuits against our customers. Any such lawsuits, whether or not they have merit, could be time-consuming to defend, damage our reputation or result in substantial and unanticipated costs.

Our inability to protect our intellectual property and proprietary technologies could result in the unauthorized use of our technologies by third parties, hurt our competitive position and adversely affect our operating results.

We rely on patents, trade secret laws, contractual agreements, technical know-how and other unpatented proprietary information to protect our products, product development and manufacturing activities from unauthorized copying by third parties. Our patents do not cover all of our technologies, systems, products and product components and may not prevent third parties from unauthorized copying of our technologies, products and product components. We seek to protect our proprietary technology under laws affording protection for trade secrets. We also seek to protect our trade secrets and proprietary information, in part, by requiring employees to enter into agreements providing for the maintenance of confidentiality and the assignment of rights to inventions made by them while employed by us. We have significant international operations and we are subject to foreign laws which differ in many respects from U.S. laws. Policing unauthorized use of our trade secret technologies throughout the world and proving misappropriation of our technologies are particularly difficult, especially due

to the number of our employees and operations in numerous foreign countries. The steps that we take to acquire ownership of our employees' inventions and trade secrets in foreign countries may not have been effective under all such local laws, which could expose us to potential claims or the inability to protect intellectual property developed by our employees. Furthermore, any changes in, or unexpected interpretations of, the trade secret and other intellectual property laws in any country in which we operate may adversely affect our ability to enforce our trade secret and intellectual property positions. Costly and time-consuming litigation could be necessary to determine the scope of our confidential information and trade secret protection. We also enter into confidentiality agreements with our consultants and other suppliers to protect our confidential information that we deliver to them. However, there can be no assurance that our confidentiality agreements will not be breached, that we will be able to effectively enforce them or that we will have adequate remedies for any breach.

Given our reliance on trade secret laws, others may independently develop similar or alternative technologies or duplicate our technologies and commercialize discoveries that we have made. Therefore, our intellectual property efforts may be insufficient to maintain our competitive advantage or to stop other parties from commercializing similar products or technologies. Many countries outside of the United States afford little or no protection to trade secrets and other intellectual property rights. Intellectual property litigation can be time-consuming and expensive, and there is no guarantee that we will have the resources to fully enforce our rights. If we are unable to prevent misappropriation or infringement of our intellectual property rights, or the independent development or design of similar technologies, our competitive position and operating results could suffer.

We depend upon internal production and on outside single or limited-source suppliers for many of our key components and raw materials, including cutting-edge optics and materials. Any interruption in the supply of these key components and raw materials could adversely affect our results of operations.

We rely exclusively on our own production capabilities to manufacture certain of our key components, such as semiconductor diodes, specialty optical fibers and optical components. We do not have redundant production lines for some of our components, such as our diodes and some other components, which are made at a single manufacturing facility. These may not be readily available from other sources at our current costs. If our manufacturing activities were obstructed or hampered significantly, it could take a considerable length of time, or it could increase our costs, for us to resume manufacturing or find alternative sources of supply. Many of the tools and equipment we use are custom-designed, and it could take a significant period of time to repair or replace them. Our three major manufacturing facilities are located in Oxford, Massachusetts; Burbach, Germany; and Fryazino, Russia. Despite our efforts to mitigate the impact of any flood, fire, natural disaster, political unrest, act of terrorism, war, outbreak of disease or other similar event, our business could be adversely affected to the extent that we do not have redundant production capabilities if any of our three major manufacturing facilities or equipment should become inoperable, inaccessible, damaged or destroyed.

Also, we purchase certain raw materials used to manufacture our products and other components, such as semiconductor wafer substrates, diode packages, modulators, micro-optics, bulk optics and high-power beam delivery products, from single or limited-source suppliers. We typically purchase our components and materials through purchase orders or agreed-upon terms and conditions and we do not have guaranteed supply arrangements with many of these suppliers. These suppliers are relatively small private companies that may discontinue their operations at any time and may be particularly susceptible to prevailing economic conditions. Some of our suppliers are also our competitors. Some of our suppliers reduced their inventory levels and manufacturing capacity because of the recent recession or other reasons. As a result, we experienced and may in the future experience longer lead times or delays in fulfillment of our orders. Furthermore, other than our current suppliers, there are a limited number of entities from whom we could obtain these supplies. We do not anticipate that we would be able to purchase these components or raw materials that we require in a short period of time or at the same cost from other sources in commercial quantities or that have our required performance specifications. Any interruption or delay in the supply of any of these components or materials, or the inability to obtain these components and materials from alternate sources at acceptable prices and within a reasonable amount of time, could adversely affect our business. If our suppliers face financial or other difficulties, if our

suppliers do not maintain sufficient inventory on hand or if there are significant changes in demand for the components and materials we obtain from them, they could limit the availability of these components and materials to us, which in turn could adversely affect our business.

Failure to effectively build and expand our direct field service and support organization could have an adverse effect on our business.

We believe that it will become increasingly important for us to provide rapid, responsive service directly to our customers throughout the world and to build and expand our own personnel resources to provide these services. Any actual or perceived lack of direct field service in the locations where we sell or try to sell our products may negatively impact our sales efforts and, consequently, our revenues. Accordingly, we have an ongoing effort to develop our direct support systems worldwide. This requires us to recruit and train additional qualified field service and support personnel as well as maintain effective and highly trained organizations that can provide service to our customers in various countries. We may not be able to attract and train additional qualified personnel to expand our direct support operations successfully. We may not be able to find and engage additional qualified third-party resources to supplement and enhance our direct support operations. Further, we may incur significant costs in providing these direct field and support services. Failure to implement our direct support operation effectively could adversely affect our relationships with our customers, and our operating results may suffer.

A few customers account for a significant portion of our sales, and if we lose any of these customers or they significantly curtail their purchases of our products, our results of operations could be adversely affected.

We rely on a few customers for a significant portion of our sales. In the aggregate, our top five customers accounted for 16%, 17% and 19% of our consolidated net sales in 2012, 2011 and 2010, respectively. Our largest customer is located in China and accounted for 7%, 8% and 7% of sales in 2012, 2011 and 2010, respectively, is located in China. We generally do not enter into agreements with our customers obligating them to purchase our fiber lasers or amplifiers. Our business is characterized by short-term purchase orders and shipment schedules. If any of our principal customers discontinues its relationship with us, replaces us as a vendor for certain products or suffers downturns in its business, our business and results of operations could be adversely affected.

We depend on our OEM customers and system integrators and their ability to incorporate our products into their systems.

Our sales depend in part on our ability to maintain existing and secure new OEM customers. Our revenues also depend in part upon the ability of our current and potential OEM customers and system integrators to develop and sell systems that incorporate our laser and amplifier products. The commercial success of these systems depends to a substantial degree on the efforts of these OEM customers and system integrators to develop and market products that incorporate our technologies. Relationships and experience with traditional laser makers, limited marketing resources, reluctance to invest in research and development and other factors affecting these OEM customers and third-party system integrators could have a substantial impact upon our financial results. If OEM customers or integrators are not able to adapt existing tools or develop new systems to take advantage of the features and benefits of fiber lasers, then the opportunities to increase our revenues and profitability may be severely limited or delayed. Furthermore, if our OEM customers or third-party system integrators experience financial or other difficulties that adversely affect their operations, our financial condition or results of operations may also be adversely affected.

Our inability to manage risks associated with our international customers and operations could adversely affect our business.

We have significant facilities in and our products are sold in numerous countries. The United States, Germany, Japan, Russia, China, Italy and Korea are our principal markets. A substantial majority of our revenues

are derived from customers, and we have substantial tangible assets, outside of the United States. We anticipate that foreign sales will continue to account for a significant portion of our revenues in the foreseeable future. Our operations and sales in these markets are subject to risks inherent in international business activities, including:

- longer accounts receivable collection periods and less developed credit assessment and collection procedures;
- fluctuations in the values of foreign currencies;
- changes in a specific country's or region's economic conditions, such as recession;
- compliance with a wide variety of domestic and foreign laws and regulations and unexpected changes in those laws and regulatory requirements, including uncertainties regarding taxes, tariffs, quotas, export controls, export licenses and other trade barriers;
- certification requirements;
- environmental regulations;
- less effective protection of intellectual property rights in some countries;
- potentially adverse tax consequences;
- different capital expenditure and budget cycles for our customers, which affect the timing of their spending;
- political, legal and economic instability, foreign conflicts, and the impact of regional and global infectious illnesses in the countries in which we and our customers, suppliers, manufacturers and subcontractors are located;
- preference for locally produced products;
- difficulties and costs of staffing and managing international operations across different geographic areas and cultures;
- seasonal reductions in business activities;
- fluctuations in freight rates and transportation disruptions;
- investment restrictions or requirements;
- repatriation restrictions or requirements; and
- export and import restrictions.

Political and economic instability and changes in governmental regulations could adversely affect both our ability to effectively operate our foreign sales offices and the ability of our foreign suppliers to supply us with required materials or services. Any interruption or delay in the supply of our required components, products, materials or services, or our inability to obtain these components, materials, products or services from alternate sources at acceptable prices and within a reasonable amount of time, could impair our ability to meet scheduled product deliveries to our customers and could cause customers to cancel orders.

We are subject to risks of doing business in Russia through our subsidiary, NTO IRE-Polus, which provides components and test equipment to us and sells finished fiber devices to customers in Russia and neighboring countries. Further, over 20% of our sales are to customers in China. The results of our operations, business prospects and facilities in these two countries are subject to the economic and political environment in Russia and China. In recent years, both countries have undergone substantial political, economic and social change. As is typical of an emerging market, neither China nor Russia possesses a well-developed business, legal and regulatory infrastructure that would generally exist in a more mature free market economy. In addition, tax, currency and customs legislation is subject to varying interpretations and changes, which can occur frequently. The future economic direction of these two emerging market countries remains largely dependent upon the effectiveness of economic, financial and monetary measures undertaken by the government, together with tax,

legal, regulatory and political developments. Our failure to manage the risks associated with our operations in Russia and China and our other existing and potential future international business operations could have a material adverse effect upon our results of operations.

We are subject to many laws governing our international operations, including those that prohibit improper payments to government officials, including but not limited to the U.S. Foreign Corrupt Practices Act and the anti-corruption laws of the countries in which we operate. Violations of these laws, which are complex and often difficult to interpret and apply, could result in significant criminal penalties or sanctions that could materially adversely affect our business, financial condition, operating results and cash flows.

Foreign currency transaction risk may negatively affect our net sales, cost of sales and operating margins and could result in exchange losses.

We conduct our business and incur costs in the local currency of most countries in which we operate. In 2012, our net sales outside the United States represented a substantial majority of our total sales. We incur currency transaction risk whenever one of our operating subsidiaries enters into either a purchase or a sales transaction using a different currency from the currency in which it receives revenues. Changes in exchange rates can also affect our results of operations by changing the U.S. dollar value of sales and expenses denominated in foreign currencies. We cannot accurately predict the impact of future exchange rate fluctuations on our results of operations. Further, given the volatility of exchange rates, we may not be able to effectively manage our currency transaction or translation risks, and any volatility in currency exchange rates may increase the price of our products in local currency to our foreign customers, which may have an adverse effect on our financial condition, cash flows and profitability.

Changes in tax rates, tax liabilities or tax accounting rules could affect future results.

As a global company, we are subject to taxation in the United States and various other countries and jurisdictions. Significant judgment is required to determine worldwide tax liabilities. Our future tax rates could be affected by changes in the composition of earnings in countries or states with differing tax rates, transfer pricing rules, changes in the valuation of our deferred tax assets and liabilities, or changes in the tax laws. In addition, we are subject to regular examination of our income tax returns by the Internal Revenue Service ("IRS") and other tax authorities. From time to time the United States, foreign and state governments make substantive changes to tax rules and the application of rules to companies, including various announcements from the United States government potentially impacting our ability to defer taxes on international earnings. We regularly assess the likelihood of favorable or unfavorable outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. Although we believe our tax estimates are reasonable, there can be no assurance that any final determination will not be materially different than the treatment reflected in our historical income tax provisions and accruals, which could materially and adversely affect our operating results and financial condition.

Our products could contain defects, which may reduce sales of those products, harm market acceptance of our fiber laser products or result in claims against us.

The manufacture of our fiber lasers and amplifiers involves highly complex and precise processes. Despite testing by us and our customers, errors have been found, and may be found in the future, in our products. These defects may cause us to incur significant warranty, support and repair costs, incur additional costs related to a recall, divert the attention of our engineering personnel from our product development efforts and harm our relationships with our customers. These problems could result in, among other things, loss of revenues or a delay in revenue recognition, loss of market share, harm to our reputation or a delay or loss of market acceptance of our fiber laser products. Defects, integration issues or other performance problems in our fiber laser and amplifier products could also result in personal injury or financial or other damages to our customers, which in turn could damage market acceptance of our products. Our customers could also seek damages from us for their losses. A product liability claim brought against us, even if unsuccessful, could be time-consuming and costly to defend.

We may experience lower than expected manufacturing yields, which would adversely affect our gross margins.

The manufacture of semiconductor diodes and the packaging of them is a highly complex process. Manufacturers often encounter difficulties in achieving acceptable product yields from diode and packaging operations. We have from time to time experienced lower than anticipated manufacturing yields for our diodes and packaged diodes. This occurs during the production of new designs and the installation and start-up of new process technologies. If we do not achieve planned yields, our product costs could increase resulting in lower gross margins, and key component availability would decrease.

Changing laws, regulations and standards relating to corporate governance and public disclosure may create uncertainty regarding compliance matters.

Federal securities laws, rules and regulations, as well as the rules and regulations of self-regulatory organizations such as NASDAQ and the NYSE, require companies to maintain extensive corporate governance measures, impose comprehensive reporting and disclosure requirements, set strict independence and financial expertise standards for audit and other committee members and impose civil and criminal penalties for companies and their chief executive officers, chief financial officers and directors for securities law violations and other laws such as anti-bribery laws. These laws, rules and regulations have increased and will continue to increase the scope, complexity and cost of our corporate governance, reporting and disclosure practices, which could harm our results of operations and divert management's attention from business operations. Changing laws, regulations and standards relating to corporate governance and public disclosure may create uncertainty regarding compliance matters. New or changed laws, regulations and standards are subject to varying interpretations in many cases. As a result, their application in practice may evolve over time. Complying with evolving interpretations of new or changed legal requirements may cause us to incur higher costs as we revise current practices, policies and procedures, and may divert management time and attention from revenue generating to compliance activities. If our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, our reputation may also be harmed.

Failure to maintain effective internal controls may cause a loss of investor confidence in the reliability of our financial statements or to cause us to delay filing our periodic reports with the SEC and adversely affect our stock price.

The SEC, as directed by Section 404 of the Sarbanes-Oxley Act of 2002, adopted rules requiring public companies to include a report of management on internal control over financial reporting in their annual reports on Form 10-K that contain an assessment by management of the effectiveness of our internal control over financial reporting. In addition, our independent registered public accounting firm must attest to and report on the effectiveness of our internal control over financial reporting. Although we test our internal control over financial reporting in order to ensure compliance with the Section 404 requirements, our failure to maintain adequate internal controls over financial reporting could result in an adverse reaction in the financial marketplace due to a loss of investor confidence in the reliability of our financial statements or a delay in our ability to timely file our periodic reports with the SEC, which ultimately could negatively impact our stock price.

Difficulties with our information technology systems could harm our business and results of operation. If our network security measures are breached and unauthorized access is obtained to a customer's data or our data or our information technology systems, we may incur significant legal and financial exposure and liabilities.

Like many multinational corporations, we maintain several information technology systems, including software products licensed from third parties. These systems vary from country to country. Any system, network or Internet failures, misuse by system users, the hacking into or disruption caused by the unauthorized access by third parties or loss of license rights could disrupt our ability to timely and accurately manufacture and ship products or to report our financial information in compliance with the timelines mandated by the SEC. Any such

failure, misuse, hacking, disruptions or loss would likely cause a diversion of management's attention from the underlying business and could harm our operations. In addition, a significant failure of our various information technology systems could adversely affect our ability to complete an evaluation of our internal controls and attestation activities pursuant to Section 404 of the Sarbanes-Oxley Act of 2002.

As part of our day-to-day business, we store our data and certain data about our customers in our information technology system. While our system is designed with access security, if a third party gains unauthorized access to our data, including information regarding our customers, such security breach could expose us to a risk of loss of this information, loss of business, litigation and possible liability. These security measures may be breached as a result of third-party action, including intentional misconduct by computer hackers, employee error, malfeasance or otherwise. Additionally, third parties may attempt to fraudulently induce employees or customers into disclosing sensitive information such as user names, passwords or other information in order to gain access to our customers' data or our data, including our intellectual property and other confidential business information, employee information or our information technology systems. Because the techniques used to obtain unauthorized access, or to sabotage systems, change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. Any security breach could result in a loss of confidence by our customers, damage our reputation, disrupt our business, lead to legal liability and negatively impact our future sales.

We are subject to export control regulations that could restrict our ability to increase our international sales and may adversely affect our business.

A significant part of our business involves the export of our products to other countries. The U.S. government has in place a number of laws and regulations that control the export, re-export or transfer of U.S.-origin products, software and technology. The governments of other countries in which we do business have similar regulations regarding products, software and technology originating in those countries. These laws and regulations may require that we obtain a license before we can export, re-export or transfer certain products, software or technology. The requirement to obtain a license could put us at a competitive disadvantage by restricting our ability to sell products to customers in certain countries or by giving rise to delays or expenses related to obtaining a license. In applying for a license and responding to questions from licensing authorities, we have experienced and, in the future, may experience delays in obtaining export licenses based on issues solely within the control of the applicable government agency. Under the discretion of the issuing government agency, an export license may permit the export of one unit to a single customer or multiple units to one or more customers. Licenses may also include conditions that limit the use, resale, transfer, re-export, modification, disassembly, or transfer of a product, software or technology after it is exported without first obtaining permission from the relevant government agency. Failure to comply with these laws and regulations could result in government sanctions, including substantial monetary penalties, denial of export privileges, debarment from government contracts and a loss of revenues. Delays in obtaining or failure to obtain required export licenses may require us to defer shipments for substantial periods or cancel orders. Any of these circumstances could adversely affect our operations and, as a result, our financial results could suffer.

We are subject to various environmental laws and regulations that could impose substantial costs upon us and may adversely affect our business, operating results and financial condition.

Some of our operations use substances regulated under various federal, state, local and international laws governing the environment, including those relating to the storage, use, discharge, disposal, product composition and labeling of, and human exposure to, hazardous and toxic materials. We could incur costs, fines and civil or criminal sanctions, third-party property damage or personal injury claims, or could be required to incur substantial investigation or remediation costs, if we were to violate or become liable under environmental laws. Liability under environmental laws can be joint and several and without regard to comparative fault. Compliance with current or future environmental laws and regulations could restrict our ability to expand our facilities or require us to acquire additional expensive equipment, modify our manufacturing processes, or incur other significant expenses in order to remain in compliance with such laws and regulations. At this time, we do not believe the costs to maintain compliance with current environmental laws to be material. Although we do not currently anticipate that such costs

will become material, if such costs were to become material in the future, whether due to unanticipated changes in environmental laws, unanticipated changes in our operations or other unanticipated changes, we may be required to dedicate additional staff or financial resources in order to maintain compliance. There can be no assurance that violations of environmental laws or regulations will not occur in the future as a result of the lack of, or failure to obtain, permits, human error, accident, equipment failure or other causes.

Our ability to access financial markets to raise capital or finance a portion of our working capital requirements and support our liquidity needs may be adversely affected by factors beyond our control and could negatively impact our ability to finance our operations, meet certain obligations or implement our operating strategy.

We occasionally borrow under our existing credit facilities to fund operations, including working capital investments. Our major credit lines in the United States and Germany expire in June 2015 and June 2014, respectively. In the past, market disruptions experienced in the United States and abroad have materially impacted liquidity in the credit and debt markets, making financing terms for borrowers less attractive, and, in certain cases, have resulted in the unavailability of certain types of financing. Uncertainty in the financial markets may negatively impact our ability to access additional financing or to refinance our existing credit facilities or existing debt arrangements on favorable terms or at all, which could negatively affect our ability to fund current and future expansion as well as future acquisitions and development. These disruptions may include turmoil in the financial services industry, unprecedented volatility in the markets where our outstanding securities trade, and general economic downturns in the areas where we do business. If we are unable to access funds at competitive rates, or if our short-term or long-term borrowing costs increase, our ability to finance our operations, meet our short-term obligations and implement our operating strategy could be adversely affected.

We also may in the future be required to raise capital through public or private financing or other arrangements. Such financing may not be available on acceptable terms, or at all, and our failure to raise capital when needed could harm our business. Additional equity financing may be dilutive to the holders of our common stock, and debt financing, if available, may involve restrictive covenants and could reduce our profitability. If we cannot raise funds on acceptable terms, we may not be able to grow our business or respond to competitive pressures.

Substantial sales of our common stock, including shares issued upon the exercise of currently outstanding options could cause our stock price to decline.

Sales of a substantial number of shares of common stock, or the perception that sales could occur, could adversely affect the market price of our common stock. As of December 31, 2012, we had 51,359,247 shares of common stock outstanding and approximately 2,789,752 shares subject to outstanding options. We have registered all shares of common stock that we may issue under our stock option plans and our employee stock ownership plan. In addition, all of the unregistered shares of our common stock are now eligible for sale under Rule 144 or Rule 701 under the Securities Act. As these shares are issued, they may be freely sold in the public market subject, in the case of any awards under our stock-based compensation plans, to applicable vesting requirements.

We currently have the ability to file a registration statement and immediately offer and sell common stock, preferred stock, warrants, debt and convertible securities because of our current status a well-known seasoned issuer. In the future, we may issue additional options, warrants or other securities convertible into our common stock. Sales of substantial amounts of shares of our common stock or other securities under any future registration statement that we may file could lower the market price of our common stock and impair our ability to raise capital through the sale of equity securities.

Dr. Valentin P. Gapontsev, our Chairman and Chief Executive Officer, and three trusts he created collectively control approximately 35% of our voting power and have a significant influence on the outcome of director elections and other matters requiring stockholder approval, including a change in corporate control.

Dr. Valentin P. Gapontsev, our Chairman and Chief Executive Officer, and IP Fibre Devices (UK) Ltd. (IPFD), of which Dr. Gapontsev is the managing director, together with three trusts he created beneficially own approximately 35% of our common stock. Trustees of the trusts are officers or employees of the Company.

Dr. Gapontsev and the trusts have a significant influence on the outcome of matters requiring stockholder approval, including:

- election of our directors;
- amendment of our certificate of incorporation or by-laws; and
- approval of mergers, consolidations or the sale of all or substantially all of our assets.

Dr. Gapontsev and the trusts may vote their shares of our common stock in ways that are adverse to the interests of other holders of our common stock. These significant ownership interests could delay, prevent or cause a change in control of our company, any of which could adversely affect the market price of our common stock.

Anti-takeover provisions in our charter documents and Delaware law could prevent or delay a change in control of our company, even if a change in control would be beneficial to our stockholders.

Provisions of our certificate of incorporation and by-laws, including certain provisions that will take effect when Dr. Valentin P. Gapontsev (together with his affiliates and associates) ceases to beneficially own an aggregate of 25% or more of our outstanding voting securities, may discourage, delay or prevent a merger, acquisition or change of control, even if it would be beneficial to our stockholders. The existence of these provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock. These provisions include:

- authorizing the issuance of "blank check" preferred stock;
- establishing a classified board;
- providing that directors may only be removed for cause;
- prohibiting stockholder action by written consent;
- limiting the persons who may call a special meeting of stockholders;
- establishing advance notice requirements for nominations for election to the board of directors and for proposing matters to be submitted to a stockholder vote; and
- supermajority stockholder approval to change these provisions.

Provisions of Delaware law may also discourage, delay or prevent someone from acquiring or merging with our company or obtaining control of our company. Specifically, Section 203 of the Delaware General Corporation Law, which will apply to our company following such time as Dr. Gapontsev (together with his affiliates and associates) ceases to beneficially own 25% or more of the total voting power of our outstanding shares, may prohibit business combinations with stockholders owning 15% or more of our outstanding voting stock.

If securities analysts stop publishing research or reports about our business, or if they downgrade our stock, the price of our stock could decline.

The trading market for our common stock relies in part on the research and reports that industry or financial analysts publish about us. If one or more of these analysts who cover us downgrade our stock, our stock price would likely decline. Further, if one or more of these analysts cease coverage of our company, we could lose visibility in the market, which in turn could cause our stock price to decline.

ITEM 1B. *UNRESOLVED STAFF COMMENTS*

None.

ITEM 2. *PROPERTIES*

Our main facilities at December 31, 2012 include the following:

Location	Owned or Leased	Lease Expiration	Approximate Size (sq. ft.)	Primary Activity
Oxford, Massachusetts	Owned	—	295,000	Diodes, components, complete device manufacturing, administration
Burbach, Germany	Owned	—	249,000	Optical fiber, components, final assembly, complete device manufacturing, administration
Fryazino, Russia	Leased Owned	July 2016	79,000 97,000	Components, complete device manufacturing, administration
Manchester, New Hampshire	Leased	December 2016	63,000	Components, complete device manufacturing, administration
Beijing, China	Leased Owned	December 2013	35,000 35,000	Administration, service Administration, service
Cerro Maggiore, Italy	Owned	—	33,000	Complete device manufacturing, administration
Daejeon, South Korea	Owned	—	24,000	Administration, service
Novi, Michigan	Owned	—	16,000	Administration, service
Yokohama, Japan	Owned	—	11,000	Administration, service
Chubu, Japan	Owned	—	10,000	Administration, service
Total sq.ft. occupied:			947,000	

We maintain our corporate headquarters in Oxford, Massachusetts, and conduct our major research and development activities in Oxford, Massachusetts, Manchester, New Hampshire, Burbach, Germany and Fryazino, Russia. We operate five manufacturing facilities for lasers, amplifiers and components, which are located in the United States, Germany, Russia and Italy. We also manufacture certain optical components and systems in India and China. We are committed to meeting internationally recognized manufacturing standards. Our facilities in the United States and Germany are ISO 9001 certified and we have ISO certification in Russia for specific products. In addition, research and development are also conducted at our facilities in Birmingham, Alabama and Marlborough, Massachusetts. We have sales personnel at each of our manufacturing facilities, and at offices in Novi, Michigan; Santa Clara, California; London, England; Illkirch, France; Bangalore, India; Beijing, China; Istanbul; Turkey; Singapore and Barcelona, Spain.

We plan to continue our expansion of our operations in Russia, Germany and the United States to meet the demand for our products and our sales and support needs. We believe that we will be able to obtain additional land or commercial space as needed. The additional expansion for Russia, Germany and the United States will provide an approximately additional 393,000 square feet, 26,000 square feet, and 126,000 square feet, respectively once these additions are completed and occupied. With the amount occupied as of December 31, 2012, once all expansions are completed in 2013, we will have approximately 1.5 million square feet of occupied space to continue to execute on our planned strategies.

ITEM 3. *LEGAL PROCEEDINGS*

From time to time, we are party to various legal claims and legal proceedings and other disputes incidental to our business, such as employment, intellectual property or product issues. For a discussion of the risks associated with intellectual property legal proceedings and other disputes, see Item 1A. "Risk Factors — We are subject to litigation alleging that we are infringing third-party intellectual property rights. Intellectual property claims could result in costly litigation and harm our business."

ITEM 4. *MINE SAFETY DISCLOSURES*

Not applicable.

PART II

ITEM 5. *MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES*

Price Range of Common Stock

Our common stock is quoted on the Nasdaq Global Market under the symbol "IPGP". The following table sets forth the quarterly high and low sale prices of our common stock as reported on the Nasdaq Global Market.

	Common Stock Price Range	
	High	Low
First Quarter ended March 31, 2011	$61.63	$29.37
Second Quarter ended June 30, 2011	$78.59	$53.08
Third Quarter ended September 30, 2011	$76.07	$42.66
Fourth Quarter ended December 31, 2011	$58.16	$33.33
First Quarter ended March 31, 2012	$61.18	$34.67
Second Quarter ended June 30, 2012	$57.51	$37.58
Third Quarter ended September 30, 2012	$65.77	$39.19
Fourth Quarter ended December 31, 2012	$67.00	$51.34

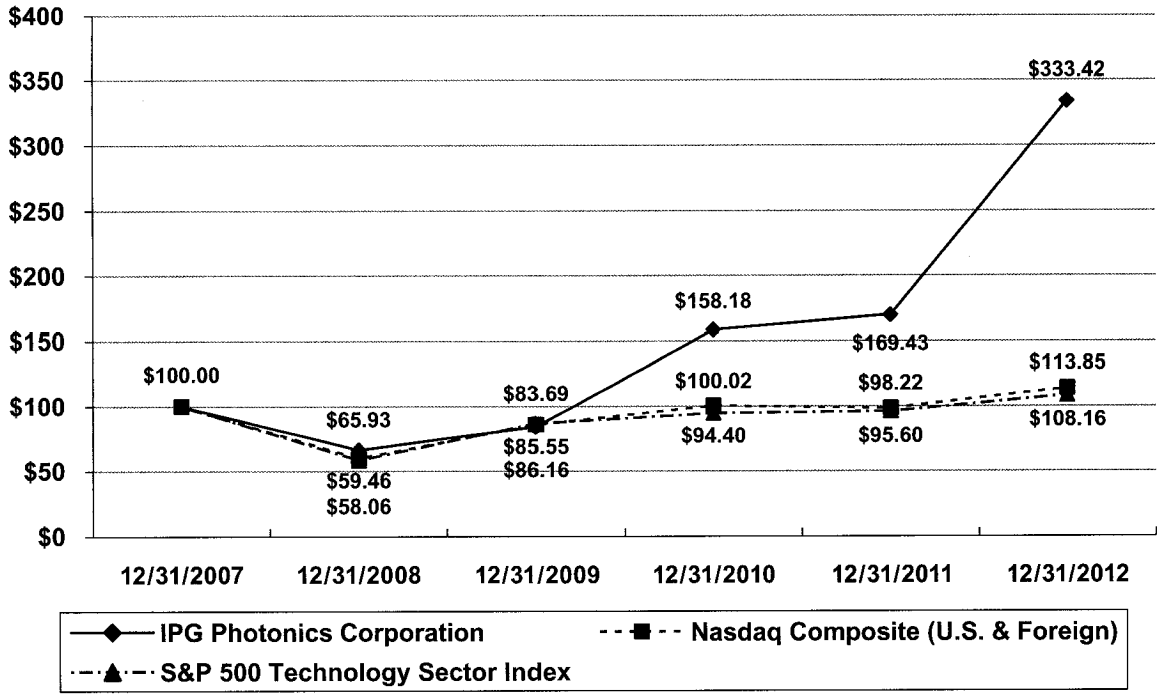
As of February 25, 2013, there were 51,415,585 shares of our common stock outstanding held by approximately 55 holders of record, which does not include beneficial owners of common stock whose shares are held in the names of various securities brokers, dealers and registered clearing agencies.

Stock Price Performance Graph

The following Stock Price Performance Graph and related information includes comparisons required by the SEC. The graph does not constitute "soliciting material" and should not be deemed "filed" or incorporated by reference into any other filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that we specifically incorporate this information by reference into such filing.

The following graph presents the cumulative shareholder returns for our Common Stock compared with the NASDAQ Composite Index and the S&P Technology Sector Index. We selected these comparative groups due to industry similarities and the fact that they contain several direct competitors.

COMPARISON OF CUMULATIVE TOTAL RETURN
AMONG THE COMPANY, THE NASDAQ COMPOSITE INDEX AND S&P 500
TECHNOLOGY SECTOR INDEX



	5-Year Cumulative Total Return					
	12/31/2007	12/31/2008	12/31/2009	12/31/2010	12/31/2011	12/31/2012
IPG Photonics Corporation	$100.00	$65.93	$83.69	$158.18	$169.43	$333.42
Nasdaq Composite (U.S. & Foreign)	$100.00	$59.46	$85.55	$100.02	$ 98.22	$113.85
S&P 500 Technology Sector Index	$100.00	$58.06	$86.16	$ 94.40	$ 95.60	$108.16

The above graph represents and compares the value, through December 31, 2012, of a hypothetical investment of $100 made at the closing price on December 31, 2007 in each of (i) our common stock, (ii) the NASDAQ Composite Stock Index and (iii) the S&P 500 Technology Sector Index, in each case assuming the reinvestment of dividends. The stock price performance shown in this graph is not necessarily indicative of, and not is intended to suggest, future stock price performance.

Dividends

We declared and paid a special cash dividend on our capital stock in December 2012 of $33.4 million or $0.65 per share. We anticipate that we will retain future earnings to support operations, fund acquisitions and to finance the growth and development of our business. Therefore, we do not expect to pay cash dividends in the foreseeable future. Our payment of any future dividends will be at the discretion of our Board of Directors after taking into account any business conditions, any contractual and legal restrictions on our payment of dividends, and our financial condition, operating results, cash needs and growth plans. In addition, current agreements with certain of our lenders contain, and future loan agreements may contain, restrictive covenants that generally prohibit us from paying cash dividends, making any distribution on any class of stock or making stock repurchases.

Recent Sales of Unregistered Securities; Use of Proceeds from Registered Securities

There have been no sales of unregistered securities during the past three years.

Use of Proceeds from Public Offering of Common Stock

On March 7, 2012, we closed a public offering of 3,250,000 shares of our common stock, consisting of 3,050,000 shares issued and sold by us and 200,000 shares sold by our chairman and chief executive officer, Dr. Valentin P. Gapontsev. The price per share to the public in the public offering was $54.30. The offer and sale of all of the shares in the public offering were registered under the Securities Act pursuant to a registration statement on Form S-3 (File No. 333-179722), which was declared effective by the SEC on March 2, 2012. Bank of America Merrill Lynch served as sole bookrunning manager for this offering and Needham & Company and Stifel Nicolaus Weisel served as co-managers. We raised approximately $167.9 million in net proceeds after deducting underwriting discounts and commissions and other offering expenses of approximately $8.6 million. No payments were made by us to directors, officers or persons owning ten percent or more of our common stock or to their associates or our affiliates, other than payments in the ordinary course of business to officers for salaries. We did not receive any proceeds from the sale of shares in the offering by Dr. Gapontsev. There has been no material change in the planned use of proceeds from our public offering as described in our automatic shelf registration statement relating to the securities offered in this offering that was filed with the SEC on February 27, 2012 and to a prospectus supplement to the prospectus contained in the shelf registration statement, which prospectus supplement was filed with the SEC on March 2, 2012, pursuant to Rule 424(b) under the Securities Act. We invested the funds received in money market funds and treasury bills.

Issuer Purchases of Equity Securities

Date	Total Number of Shares (or Units) Purchased	Average Price Paid per Share (or Unit)	Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs
November 1, 2012 — November 30, 2012	3,128(1)	$55.27	$ —	$ —
December 1, 2012 — December 30, 2012	106(1)	59.10	—	—
Total	3,234	$55.40	$ —	$ —

(1) Our Board of Directors approved "withhold to cover" as a tax payment method for vesting of restricted stock awards for certain employees. Pursuant to the "withhold to cover" method, we withheld from such employees the shares noted in the table above to cover tax withholding related to the vesting of their awards. The average prices listed in the above table are averages of the fair market prices at which we valued shares withheld for purposes of calculating the number of shares to be withheld.

Information Regarding Equity Compensation Plans

The following table sets forth information with respect to securities authorized for issuance under our equity compensation plans as of December 31, 2012:

Equity Compensation Plan Information

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity Compensation Plans Approved by Security Holders	2,789,752	$29.50	6,465,903
Equity Compensation Plans Not Approved by Security Holders	—		—
Total	2,789,752		6,465,903

ITEM 6. *SELECTED FINANCIAL DATA*

The following selected consolidated financial data should be read in conjunction with, and is qualified by reference to, our consolidated financial statements and related notes and Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Annual Report on Form 10-K. The data as of December 31, 2012 and 2011, and for the years ended December 31, 2012, 2011 and 2010, is derived from our audited consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. The data as of December 31, 2010, 2009 and 2008, and for the years ended December 31, 2009 and 2008, is derived from our audited consolidated financial statements and related notes not included in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results for any future period.

	Year Ended December 31,				
	2012	2011	2010	2009	2008
	(In thousands, except per share data)				
Consolidated Statement of Income Data:					
Net sales	$562,528	$474,482	$299,256	$185,894	$229,076
Cost of sales	257,801	217,227	152,798	121,626	121,776
Gross profit	304,727	257,255	146,458	64,268	107,300
Operating expenses:					
Sales and marketing	23,845	21,731	19,100	15,157	13,900
Research and development	31,401	25,422	19,160	18,543	15,804
General and administrative	39,231	37,442	28,645	20,489	23,198
Loss (gain) on foreign exchange	1,362	(2,862)	(848)	1,022	(2,798)
Total operating expenses	95,839	81,733	66,057	55,211	50,104
Operating income	208,888	175,522	80,401	9,057	57,196
Interest income (expense), net	319	(681)	(1,188)	(1,252)	(777)
Other income (expense), net	8	(257)	39	(36)	145
Income before provision for income taxes	209,215	174,584	79,252	7,769	56,564
Provision for income taxes	(61,471)	(53,575)	(24,900)	(2,485)	(18,111)
Net income	147,744	121,009	54,352	5,284	38,453
Less: Net income (loss) attributable to noncontrolling interests	2,740	3,250	361	(135)	1,799
Net income attributable to IPG Photonics Corporation	145,004	117,759	53,991	5,419	36,654
Net income attributable to common shareholders	$145,004	$117,759	$ 53,991	$ 5,419	$ 36,654
Net income per share:					
Basic	$ 2.87	$ 2.48	$ 1.16	$ 0.12	$ 0.82
Diluted	$ 2.81	$ 2.41	$ 1.13	$ 0.12	$ 0.79
Weighted-average shares outstanding:					
Basic	50,477	47,365	46,424	45,489	44,507
Diluted	51,536	48,685	47,594	46,595	46,223
Dividends per common share	$ 0.65	$ —	$ —	$ —	$ —

	As of December 31,				
	2012	2011	2010	2009	2008
			(In thousands)		
Consolidated Balance Sheet Data:					
Cash and cash equivalents	$384,053	$180,234	$147,860	$ 82,920	$ 51,283
Short-term investments	—	25,451	—	—	—
Working capital, excluding cash and cash equivalents and short-term investments	155,451	135,060	70,171	61,163	80,714
Total assets	895,498	608,132	441,855	312,636	313,218
Revolving line-of-credit facilities	2,442	7,057	6,841	6,007	19,769
Long-term debt, including current portion	15,519	17,339	16,977	18,000	19,330
Redeemable noncontrolling interests	—	46,123	24,903	—	—
IPG Photonics Corporation stockholders' equity	742,927	443,323	316,600	256,430	238,172

ITEM 7. *MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS*

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with Item 6, "Selected Financial Data" and our consolidated financial statements and related notes included in this Annual Report on Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors including, but not limited to, those discussed under Item 1A, "Risk Factors."

Overview

We develop and manufacture a broad line of high-performance fiber lasers, fiber amplifiers and diode lasers that are used for diverse applications, primarily in materials processing. We sell our products globally to OEMs, system integrators and end users. We market our products internationally primarily through our direct sales force.

We are vertically integrated such that we design and manufacture most of our key components used in our finished products, from semiconductor diodes to optical fiber preforms, finished fiber lasers and amplifiers. We also manufacture certain complementary products used with our lasers, including optical delivery cables, fiber couplers, beam switches, optical heads and chillers. In addition, we offer laser-based systems for certain markets and applications

Description of Our Net Sales, Costs and Expenses

Net sales. We derive net sales primarily from the sale of fiber lasers and amplifiers. We also sell diode lasers, communications systems, laser systems and complementary products. We sell our products through our direct sales organization and our network of distributors and sales representatives, as well as system integrators. We sell our products to OEMs that supply materials processing laser systems, communications systems and medical laser systems to end users. We also sell our products to end users that build their own systems which incorporate our products or use our products as an energy or light source. Our scientists and engineers work closely with OEMs, systems integrators and end users to analyze their system requirements and match appropriate fiber laser or amplifier specifications. Our sales cycle varies substantially, ranging from a period of a few weeks to as long as one year or more, but is typically several months.

Sales of our products generally are recognized upon shipment, provided that no obligations remain and collection of the receivable is reasonably assured. Our sales typically are made on a purchase order basis rather than through long-term purchase commitments.

We develop our products to standard specifications and use a common set of components within our product architectures. Our major products are based upon a common technology platform. We continually enhance these and other products by improving their components and developing new components and new product designs.

The average selling prices of our products generally decrease as the products mature. These decreases result from factors such as decreased manufacturing costs and increases in unit volumes, increased competition, the introduction of new products and market share considerations. In the past, we have lowered our selling prices in order to penetrate new markets and applications. Furthermore, we may negotiate discounted selling prices from time to time with certain customers that purchase multiple units.

Cost of sales. Our cost of sales consists primarily of the cost of raw materials and components, direct labor expenses and manufacturing overhead. We are vertically integrated and currently manufacture all critical components for our products as well as assemble finished products. We believe our vertical integration allows us to increase efficiencies, leverage our scale and lower our cost of sales. Cost of sales also includes personnel costs and overhead related to our manufacturing and engineering operations, related occupancy and equipment costs, shipping costs and reserves for inventory obsolescence and for warranty obligations. Inventories are written off and charged to cost of sales when identified as excess or obsolete.

Due to our vertical integration strategy and ongoing investment in plant and machinery, we maintain a relatively high fixed manufacturing overhead. We may not adjust these fixed costs quickly enough to adapt to rapidly changing market conditions. Our gross margin is therefore significantly affected by our sales volume and the corresponding utilization of capacity and absorption of fixed manufacturing overhead expenses.

Sales and marketing. Our sales and marketing expense consists primarily of costs related to compensation, trade shows, professional and technical conferences, travel, facilities, depreciation of equipment used for demonstration purposes and other marketing costs.

Research and development. Our research and development expense consists primarily of compensation, development expenses related to the design of our products and certain components, and facilities costs. Costs related to product development are recorded as research and development expenses in the period in which they are incurred.

General and administrative. Our general and administrative expense consists primarily of compensation and associated costs for executive management, finance, legal and other administrative personnel, outside legal and professional fees, allocated facilities costs and other corporate expenses.

Factors and Trends That Affect Our Operations and Financial Results

In reading our financial statements, you should be aware of the following factors and trends that our management believes are important in understanding our financial performance.

Net sales. Our net sales grew from $229.1 million in 2008 to $562.5 million in 2012, representing a compound annual growth rate of approximately 25%. Net sales growth was driven by (i) increasing demand for our products, fueled by the decreasing average cost per watt of output power and resulting increased cost competitiveness compared to traditional lasers, (ii) the introduction of new products, including our high-power lasers with higher output power levels, (iii) the growing market acceptance of fiber lasers and (iv) the development of new applications for our products and new OEM customer relationships. Our annual revenue growth rates have varied. Net sales increased by 19%, 59% and 61% in 2012, 2011 and 2010, respectively. However in 2009, our net sales decreased by 19%, primarily due to the global economic downturn. Our growth rate was 21% in 2008.

Our business depends substantially upon capital expenditures by our customers, particularly by manufacturers in the materials processing market, which include general manufacturing, automotive, aerospace, consumer, semiconductor and electronics. Approximately 88% of our revenues in 2012 were from customers in the materials processing market. Although applications in this market are broad, the capital equipment market in general is cyclical and historically has experienced sudden and severe downturns. For the foreseeable future, our operations will continue to depend upon capital expenditures by customers in the materials processing market and will be subject to the broader fluctuations of capital equipment spending.

Our net sales have historically fluctuated from quarter to quarter. The increase or decrease in sales from a prior quarter can be affected by the timing of orders received from customers, the shipment, installation and acceptance of products at our customers' facilities, the mix of OEM orders and one-time orders for products with large purchase prices, and seasonal factors such as the purchasing patterns and levels of activity throughout the year in the regions where we operate. Historically, our net sales have been higher in the second half of the year than in the first half of the year. Furthermore, net sales can be affected by the time taken to qualify our products for use in new applications in the end markets that we serve. The adoption of our products by a new customer or qualification in a new application can lead to an increase in net sales for a period, which may then slow until we penetrate new markets or obtain new customers.

Gross margin. Our total gross margin in any period can be significantly affected by total net sales in any period, by product mix, that is, the percentage of our revenue in the period that is attributable to higher or lower-power products, and by other factors, some of which are not under our control.

Our product mix affects our margins because the selling price per watt is generally higher for low and mid-power devices and certain specialty products than for high-power devices sold in large volumes. The overall cost of high-power lasers may be partially offset by improved absorption of fixed overhead costs associated with sales of larger volumes of higher-power products because they use a greater number of optical components and drive economies of scale in manufacturing. Also, the margins on systems can be lower than margins for our laser and amplifier sources, depending on the configuration, volume and competitive forces, among other factors.

We invested $68.2 million, $53.0 million and $28.4 million in capital expenditures in 2012, 2011 and 2010, respectively. Most of this investment relates to expansion of our manufacturing capacity.

A high proportion of our costs is fixed so they are generally difficult or slow to adjust in response to changes in demand. In addition, our fixed costs increase as we expand our capacity. Gross margins generally decline if production volumes are lower as a result of a decrease in sales or a reduction in inventory because utilization of capacity and the absorption of fixed manufacturing costs will be reduced. Gross margins generally improve when the opposite occurs. In addition, absorption of fixed costs can benefit gross margins due to an increase in production that is not sold and placed into inventory. If both sales and inventory decrease in the same period, the decline in gross margin may be greater if we cannot reduce fixed costs or choose not to reduce fixed costs to match the decrease in the level of production. If we experience a decline in sales that reduces absorption of our fixed costs, or if we have production issues or inventory write-downs, our gross margins will be negatively affected.

We also regularly review our inventory for items that are slow-moving, have been rendered obsolete or determined to be excess. Any write-off of such slow-moving, obsolete or excess inventory affects our gross margins. For example, we recorded provisions for slow-moving, obsolete or excess inventory totaling $8.2 million, $6.1 million and $2.7 million in 2012, 2011 and 2010, respectively.

Sales and marketing expense. We expect to continue to expand our worldwide direct sales organization, build and expand applications centers, hire additional personnel involved in marketing in our existing and new geographic locations, increase the number of units for demonstration purposes and otherwise increase expenditures on sales and marketing activities in order to support the growth in our net sales. As such, we expect that our sales and marketing expenses will increase in the aggregate.

Research and development expense. We plan to continue to invest in research and development to improve our existing components and products and develop new components, products and systems. The amount of research and development expense we incur may vary from period to period. In general, if net sales continue to increase we expect research and development expense to increase in the aggregate.

General and administrative expense. We expect our general and administrative expenses to increase as we continue to invest in systems and resources to support our worldwide operations. Legal expenses vary from quarter to quarter based primarily upon the level of litigation activity.

Major customers. While we have historically depended on a few customers for a large percentage of our annual net sales, the composition of this group can change from year to year. Net sales derived from our five largest customers as a percentage of our annual net sales were 16% in 2012, 17% in 2011 and 19% in 2010. Sales to our largest customer accounted for 7%, 8% and 7% of our net sales in 2012, 2011 and 2010, respectively. We seek to add new customers and to expand our relationships with existing customers. We anticipate that the composition of our net sales to our significant customers will continue to change. If any of our significant customers were to substantially reduce their purchases from us, our results would be adversely affected.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of net sales and expenses. By their nature, these estimates and judgments are subject to an inherent degree of uncertainty. On an ongoing basis we re-evaluate our judgments and estimates including those related to inventories, income taxes and the fair value of certain debt and equity instruments including stock-based compensation. We base our estimates and judgments on our historical experience and on other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making the judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates, which may materially affect our operating results and financial position. The accounting policies described below are those which, in our opinion, involve the most significant application of judgment, or involve complex estimation, and which could, if different judgments or estimates were made, materially affect our reported results of operations and financial position.

Revenue Recognition. We recognize revenue in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 605. Revenue from orders with multiple deliverables is divided into separate units of accounting when certain criteria are met. These separate units generally consist of equipment and installation. The consideration for the arrangement is then allocated to the separate units of accounting based on their relative selling prices. The selling price of equipment is based on vendor-specific objective evidence and the selling price of installation is based on third-party evidence. Applicable revenue recognition criteria are then applied separately for each separate unit of accounting. Equipment revenue generally is recognized upon the transfer of ownership which is typically at the time of shipment. Installation revenue is recognized upon completion of the installation service which typically occurs within 30 to 90 days of delivery. Returns and customer credits are infrequent and are recorded as a reduction to revenue. Rights of return generally are not included in sales arrangements.

Allowance for Doubtful Accounts. The Company maintains an allowance for doubtful accounts to provide for the estimated amount of accounts receivable that will not be collected. The allowance is based upon an assessment of customer creditworthiness, historical payment experience and the age of outstanding receivables.

Inventory. Inventory is stated at the lower of cost (first-in, first-out method) or market value. Inventory includes parts and components that may be specialized in nature and subject to rapid obsolescence. We maintain a reserve for inventory items to provide for an estimated amount of excess or obsolete inventory. The reserve is based upon a review of inventory materials on hand, which we compare with estimated future usage and age. In

addition, we review the inventory and compare recorded costs with estimates of current market value. Write-downs are recorded to reduce the carrying value to the net realizable value with respect to any part with costs in excess of current market value. Estimating demand and current market values is inherently difficult, particularly given that we make highly specialized components and products. We determine the valuation of excess and obsolete inventory by making our best estimate considering the current quantities of inventory on hand and our forecast of the need for this inventory to support future sales of our products. We often have limited information on which to base our forecasts. If future sales differ from these forecasts, the valuation of excess and obsolete inventory may change and additional inventory provisions may be required. Because of our vertical integration, a significant or sudden decrease in sales could result in a significant change in the estimates of excess or obsolete inventory valuation. We recorded inventory charges of $8.2 million, $6.1 million and $2.7 million in 2012, 2011 and 2010, respectively.

Stock-based compensation. Stock-based compensation is included in the following financial statement captions as follows:

	Year Ended December 31,		
	2012	2011	2010
Cost of sales	$ 2,184	$ 1,731	$ 727
Sales and marketing	1,052	1,503	801
Research and development	1,327	1,036	446
General and administrative	4,002	3,778	1,222
Total stock-based compensation	8,565	8,048	3,196
Tax benefit recognized	(2,629)	(2,551)	(973)
Net stock-based compensation	$ 5,936	$ 5,497	$2,223

We allocate and record stock-based compensation expense on a straight-line basis over the requisite service period.

We calculate the fair value of stock option grants using the Black-Scholes option pricing model. Determining the appropriate fair value model and calculating the fair value of stock-based payment awards require the use of highly subjective assumptions, including the expected life of the stock-based payment awards and stock price volatility. The assumptions used to calculate the fair value of stock-based payment awards represent management's best estimates, but the estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and we use different assumptions, our stock-based compensation expense could be materially different in the future. The weighted average assumptions used in the Black-Scholes model or the calculation of compensation were as follows:

	Year Ended December 31,		
	2012	2011	2010
Expected term	4.0-6.6 years	3.4-6.9 years	2.9-5.9 years
Volatility	49%-56%	46%-56%	42%-48%
Risk-free rate of return	0.59%-1.23%	0.48%-2.82%	0.34%-2.68%
Dividend yield	0%	0%	0%
Forfeiture rate	0%-6.1%	0%-6.26%	0%-5.0%

As stock-based compensation expense recorded in our statements of operations is based on options ultimately expected to vest, it has been reduced for estimated forfeitures. We estimate forfeitures at the time of grant and revise these estimates, if necessary, in subsequent periods if actual forfeitures differ from the estimates.

We have offered an employee stock purchase plan covering our U.S. and German employees. The plan allows employees who participate to purchase shares of common stock through payroll deductions at a 15% discount to the lower of the stock price on the first day or last day of the six-month purchase period. Payroll

deductions may not exceed 10% of the employee's compensation. Compensation expense related to the employee stock purchase plan for the years ended December 31, 2012, 2011 and 2010, was approximately $0.5 million, $0.4 million and $0.2 million, respectively.

Income Taxes and Deferred Taxes. Our annual tax rate is based on our income, statutory tax rates and tax planning opportunities available to us in the various jurisdictions in which we operate.

We file federal and state income tax returns in the United States and tax returns in numerous international jurisdictions. We must estimate our income tax expense after considering, among other factors, intercompany transactions on an arm's length basis, differing tax rates between jurisdictions, allocation factors, tax credits, nondeductible items and changes in enacted tax rates. Significant judgment is required in determining our annual tax expense and in evaluating our tax positions. As we continue to expand globally, there is a risk that, due to complexity within and diversity among the various jurisdictions in which we do business, a governmental agency may disagree with the manner in which we have computed our taxes. Additionally, due to the lack of uniformity among all of the foreign and domestic taxing authorities, there may be situations where the tax treatment of an item in one jurisdiction is different from the tax treatment in another jurisdiction or that the transaction causes a tax liability to arise in another jurisdiction.

Deferred taxes arise because of the different treatment between financial statement accounting and tax accounting, known as "temporary differences." The tax effects of these temporary differences are recorded as deferred tax assets and deferred tax liabilities on the consolidated balance sheet. At December 31, 2012, we recorded a net deferred tax asset of $4.7 million. If insufficient evidence of our ability to generate future taxable income arises, we may be required to record a valuation allowance against these assets, which will result in additional income tax expense. On a quarterly basis, we evaluate whether the deferred tax assets may be realized in the future and assess the need for a valuation allowance.

Changes in tax laws and rates may affect recorded deferred tax assets and liabilities and our effective tax rate in the future. The American Taxpayer Relief Act of 2012 (the "Act") was signed into law on January 2, 2013. Because a change in tax law is accounted for in the period of enactment, certain provisions of the Act benefiting our 2012 U.S. federal taxes, including the research and experimentation credit, cannot be recognized in our 2012 financial results and instead will be reflected in our 2013 financial results. We estimate that a benefit of approximately $0.8 million will be accounted for as a discrete item in our tax provision for the first quarter of 2013. In addition, we expect that the Act's extension of these provisions through the end of 2013 will favorably affect our estimated annual effective tax rate for 2013 by approximately 0.4 percentage points as compared to 2012.

We provide reserves for potential payments of tax to various tax authorities related to uncertain tax positions and other issues. Reserves recorded are based on a determination of whether and how much of a tax benefit taken by us in our tax filings or positions is "more likely than not" to be realized following resolution of any potential contingencies present related to the tax benefit, assuming that the matter in question will be raised by the tax authorities. Potential interest and penalties associated with such uncertain tax positions is recorded as a component of income tax expense. At December 31, 2012, we had unrecognized tax benefits of approximately $5.4 million that, if recognized, would be recorded as a reduction in income tax expense.

At December 31, 2012, we had $226.0 million of cash in the United States and the remainder of $158.1 million at foreign locations. Cash outside of the United States is intended to fund working capital and business expansion outside the United States.

Results of Operations

The following table sets forth selected statement of operations data for the periods indicated in dollar amounts and expressed as a percentage of net sales.

	Year Ended December 31,					
	2012		2011		2010	
	(In thousands, except percentages and per share data)					
Net sales	$562,528	100.0%	$474,482	100.0%	$299,256	100.0%
Cost of sales	257,801	45.8	217,227	45.8	152,798	51.1
Gross profit	304,727	54.2	257,255	54.2	146,458	48.9
Operating expenses:						
Sales and marketing	23,845	4.2	21,731	4.6	19,100	6.4
Research and development	31,401	5.6	25,422	5.4	19,160	6.4
General and administrative	39,231	7.0	37,442	7.9	28,645	9.6
Loss (gain) on foreign exchange	1,362	0.2	(2,862)	(0.6)	(848)	(0.3)
Total operating expenses	95,839	17.0	81,733	17.2	66,057	22.1
Operating income	208,888	37.1	175,522	37.0	80,401	26.9
Interest income (expense), net	319	0.1	(681)	(0.1)	(1,188)	(0.4)
Other income (expense), net	8	0.0	(257)	(0.1)	39	0.0
Income before provision for income taxes	209,215	37.2	174,584	36.8	79,252	26.5
Provision for income taxes	(61,471)	(10.9)	(53,575)	(11.3)	(24,900)	(8.3)
Net income	147,744	26.3	121,009	25.5	54,352	18.2
Less: Net income attributable to noncontrolling interests	2,740	0.5	3,250	0.7	361	0.1
Net income attributable to IPG Photonics Corporation	$145,004	25.8%	$117,759	24.8%	$ 53,991	18.0%
Net income attributable to IPG Photonics Corporation per share:						
Basic	$ 2.87		$ 2.48		$ 1.16	
Diluted	$ 2.81		$ 2.41		$ 1.13	
Weighted-average shares outstanding:						
Basic	50,477		47,365		46,424	
Diluted	51,536		48,685		47,594	

Comparison of Year Ended December 31, 2012 to Year Ended December 31, 2011

Net sales. Net sales increased by $88.0 million, or 18.6%, to $562.5 million in 2012 from $474.5 million in 2011. The table below sets forth sales by application (in thousands, except for percentages):

	Year Ended December 31,					
	2012		2011		Change	
		% of Total		% of Total		
Materials Processing	$492,013	87.5%	$419,443	88.4%	$72,570	17.3%
Other applications	70,515	12.5%	55,039	11.6%	15,476	28.1%
Total	$562,528	100.0%	$474,482	100.0%	$88,046	18.6%

Sales for materials processing applications increased primarily due to higher sales of high-power and medium-power lasers used in cutting and welding applications and pulsed lasers used in marking and engraving

applications. We continue to see increased acceptance of fiber laser technology. A growing number of OEM customers have developed cutting systems that use our high power lasers and sales of these systems are gaining sales from gas laser systems. In addition, new welding processes using fiber lasers have been developed, increasing sales of lasers for this application, which are replacing traditional laser and non-laser welding technologies. We also increased sales of pulsed lasers used for marking and engraving applications due to increased demand in consumer electronics applications. The increase in other applications sales relates primarily to an increase in sales of high-power, high-brightness lasers used in advanced applications.

Cost of sales and gross margin. Cost of sales increased by $40.6 million, or 18.7%, to $257.8 million in 2012 from $217.2 million in 2011. Our gross margin remained consistent at 54.2% in 2012 from 54.2% in 2011. Gross margin was positively affected by product mix and by reductions in direct product cost due to continued reduction of the cost of internally manufactured components. This benefit was offset by a decrease in absorption of fixed manufacturing costs. Expenses related to inventory reserves and other valuation adjustments increased by $2.1 million to $8.2 million, or 1.5% of sales, for the year ended December 31, 2012, as compared to $6.1 million, or 1.3% of sales, for the year ended December 31, 2011.

Sales and marketing expense. Sales and marketing expense increased by $2.1 million, or 9.7%, to $23.8 million in 2012 from $21.7 million in 2011, primarily as a result of increases in personnel costs, depreciation of product used for demonstration purposes and advertising and trade show expenses. As a percentage of sales, sales and marketing expense decreased to 4.2% in 2012 from 4.6% in 2011. As we continue to expand our worldwide sales organization, we expect sales and marketing expenses to increase in the aggregate.

Research and development expense. Research and development expense increased by $6.0 million, or 23.5%, to $31.4 million in 2012 from $25.4 million in 2011. This increase was primarily as a result of increases in personnel costs and in material expenses. Research and development activity continues to focus on enhancing the performance of our internally manufactured components, refining production processes to improve manufacturing yields, the development of new products operating at different wavelengths and higher output powers and new complementary accessories. As a percentage of sales, research and development expense increased to 5.6% in 2012 from 5.4% in 2011. We expect to continue to invest in research and development and that research and development expense will increase in the aggregate.

General and administrative expense. General and administrative expense increased by $1.8 million, or 4.8%, to $39.2 million in 2012 from $37.4 million in 2011, primarily due to increased personnel cost, increased recruitment costs and increased travel expenses offset by decreased legal expense. Legal expense decreased following a favorable verdict in 2011 in a patent infringement lawsuit. As a percentage of sales, general and administrative expense decreased to 7.0% in 2012 from 7.9% in 2011. We expect general and administrative expenses to increase as we invest to support the expected growth in net sales.

Effect of exchange rates on sales, gross margin and operating expenses. We estimate that if exchange rates had been the same as one year ago, sales in 2012 would have been $14.3 million higher, gross margin would have been $7.8 million higher and operating expenses in total would have been $2.1 million higher. The measures that assume constant exchange rates between fiscal year 2012 and fiscal year 2011 are calculated using the average exchange rates for the twelve-month period ended December 31, 2011 for the respective currencies, which were Euro 1=US$1.39, Japanese Yen 1=US$0.01, Chinese Yuan 1=US$0.15 and Russian Ruble 1=US$0.03.

Gain (loss) on foreign exchange. We incurred a foreign exchange loss of $1.4 million in 2012 as compared to a gain of $2.9 million in 2011. The change was primarily attributable to the depreciation of the U.S. Dollar against the Euro, Russian Ruble and Japanese Yen.

Interest income (expense), net. Interest income (expense), net was $0.3 million of income in 2012 compared to $0.7 million of expense in 2011. The increase in income is the result of increases in interest-bearing deposits during the period as well as increases in cash and cash equivalents.

Provision for income taxes. Provision for income taxes was $61.5 million in 2012 compared to $53.6 million in 2011, representing an effective tax rate of 29.4% in 2012 and 30.7% in 2011. The increase in the provision for income taxes was due to an increase in income before the provision for income taxes, while the decrease in the effective rate was due to the proportion of income earned in countries with lower enacted tax rates.

Net income. Net income attributable to IPG Photonics Corporation increased by $27.2 million to $145.0 million in 2012 from $117.8 million in 2011. Net income attributable to IPG Photonics Corporation as a percentage of our net sales increased by 1 percentage point to 25.8% in 2012 from 24.8% in 2011 due to the factors described above.

Comparison of Year Ended December 31, 2011 to Year Ended December 31, 2010

Net sales. Net sales increased by $175.2 million, or 58.6%, to $474.5 million in 2011 from $299.3 million in 2010. The table below sets forth sales by application (in thousands, except for percentages):

	Year Ended December 31,					
	2011		2010		Change	
		% of Total		% of Total		%
Materials Processing	$419,443	88.4%	$252,014	84.2%	$167,429	66.4%
Other applications	55,039	11.6	47,242	15.8	7,797	16.5
Total	$474,482	100.0%	$299,256	100.0%	$175,226	58.6%

Sales for materials processing applications increased due to substantially increased sales of high-power lasers used in cutting and welding applications and pulsed lasers used in marking and engraving applications. Sales for communications applications increased due to increased sales of amplifiers in both the United States and Russia. Sales for medical applications increased due to increased demand from our established customer in the United States and sales to new customers in Europe and Asia. The increase in sales of advanced applications was due to higher sales of high-power lasers used in university applications partially offset by decreased sales for optical pumping and research and development applications.

Cost of sales and gross margin. Cost of sales increased by $64.4 million, or 42.2%, to $217.2 million in 2011 from $152.8 million in 2010. Our gross margin increased to 54.2% in 2011 from 48.9% in 2010. The increase in gross margin was the result of an increase in net sales and more favorable absorption of our fixed manufacturing costs due to an increase in production volume. In addition, cost of sales benefited from a reduction in the cost per watt of our diodes and lower costs associated with greater use of internally manufactured components and accessories.

Expenses related to inventory reserves and other valuation adjustments increased by $3.4 million to $6.1 million, or 1.3% of sales, for the year ended December 31, 2011, as compared to $2.7 million, or 0.9% of sales, for the year ended December 31, 2010.

Sales and marketing expense. Sales and marketing expense increased by $2.6 million, or 13.7%, to $21.7 million in 2011 from $19.1 million in 2010, primarily as a result of an increase in personnel costs due to an increase in headcount and bonus accruals. As a percentage of sales, sales and marketing expense decreased to 4.6% in 2011 from 6.4% in 2010.

Research and development expense. Research and development expense increased by $6.2 million, or 32.7%, to $25.4 million in 2011 from $19.2 million in 2010. This increase was primarily the result of an increase in personnel, consultant costs, and an increase in materials used in research and development activities. The increase in personnel costs was driven primarily by increases in headcount and bonus accruals. Research and

development activity continues to focus on enhancing the performance of our internally manufactured components, refining production processes to improve manufacturing yields, developing new products operating at different wavelengths and higher output powers and new complementary accessories used with our products. As a percentage of sales, research and development expense decreased to 5.4% in 2011 from 6.4% in 2010.

General and administrative expense. General and administrative expense increased by $8.8 million, or 30.7%, to $37.4 million in 2011 from $28.6 million in 2010, primarily due to a $5.7 million increase in personnel attributable to higher bonuses and stock compensation and $2.3 million increase in accounting and legal fees primarily related to higher legal costs incurred in defending a patent infringement action that went to trial in 2011. As a percentage of sales, general and administrative expense decreased to 7.9% in 2011 from 9.6% in 2010.

Effect of exchange rates on sales, gross margin and operating expenses. We estimate that if exchange rates had been the same as one year ago, sales in 2011 would have been $17.2 million lower, gross margin would have been $7.1 million lower and operating expenses in total would have been $2.0 million lower. The measures that assume constant exchange rates between fiscal year 2011 and fiscal year 2010 are calculated using the average exchange rates for the twelve-month period ended December 31, 2010 for the respective currencies, which were Euro 1=US$1.33, Japanese Yen 1= US$0.01 and Russian Ruble 1=US$0.03.

Gain (loss) on foreign exchange. We incurred a foreign exchange gain of $2.9 million in 2011 as compared to a gain of $0.8 million in 2010. The change was primarily attributable to the depreciation of the Euro against the U.S. Dollar and Japanese Yen.

Interest expense, net. Interest expense, net was $0.7 million in 2011 compared to $1.2 million in 2010.

Provision for income taxes. Provision for income taxes was $53.6 million in 2011 compared to $24.9 million in 2010, representing an effective tax rate of 30.7% in 2011 and 31.4% in 2010. The increase in the provision for income taxes was due to an increase in income before the provision for income taxes, while the decrease in the effective rate was due to the proportion of income earned in countries with lower enacted tax rates.

Net income. Net income attributable to IPG Photonics Corporation increased by $63.8 million to $117.8 million in 2011 from $54.0 million in 2010. Net income attributable to IPG Photonics Corporation as a percentage of our net sales increased by 6.8 percentage points to 24.8% in 2011 from 18.0% in 2010 due to the factors described above.

Liquidity and Capital Resources

Our principal sources of liquidity as of December 31, 2012 consisted of cash and cash equivalents of $384.1 million, unused credit lines and overdraft facilities of $61.4 million and working capital (excluding cash and cash equivalents) of $155.5 million. This compares to cash and cash equivalents of $180.2 million, short-term investments of $25.5 million, unused credit lines and overdraft facilities of $49.8 million and working capital (excluding cash and cash equivalents and short-term investments) of $135.1 million as of December 31, 2011. The increase in cash and cash equivalents of $203.9 million from December 31, 2011 relates primarily to net cash received in the follow-on public stock offering of $167.9 million, net of offering expenses, during the first quarter of 2012 and the maturity of short-term investments of $25.5 million during 2012. Also, cash provided by operating activities in 2012 was $175.3 million. These increases were partially offset by capital expenditures of $68.2 million and the repurchase of the redeemable noncontrolling interest of $55.4 million and payment of a special dividend of $33.4 million. Operating cash flow in the first quarter of 2013 will be reduced by cash payments for corporation taxes in Germany which we expect to be more than $30.0 million. This payment primarily relates to taxes for fiscal year 2011 which became payable after we completed our 2011 German tax filing during the fourth quarter of 2012.

Our long-term debt consists primarily of a $14.0 million secured variable-rate note, of which the current portion is $1.4 million as of December 31, 2012. The note matures in June 2015, at which time the outstanding debt balance will be $10.7 million. The variable interest rate was fixed by means of interest rate swap instruments. In January 2011, we entered into a 10-year Euro 1.4 million ($1.9 million) mortgage obligation to fund the purchase of a new building in Italy, of which the current portion is $0.1 million as of December 31, 2012. The interest on this mortgage obligation is fixed at 4.96% and it amortizes in full over the term of the obligation.

In June 2012, our German subsidiary entered into a new credit facility with Deutsche Bank AG (the "Euro Credit Facility") to replace the prior credit facility that expired on June 30, 2012. The Euro Credit Facility makes available Euro 20.0 million ($26.4 million) and will expire on June 30, 2014.

We expect that our existing cash and cash equivalents, our cash flows from operations and our existing lines of credit will be sufficient to meet our liquidity and capital needs for the foreseeable future. Our future long-term capital requirements depend on many factors including our level of sales, the impact of economic recessions on our sales levels, the timing and extent of spending to support development efforts, the expansion of our sales and marketing activities, the timing and introductions of new products, the need to ensure access to adequate manufacturing capacity and the continuing market acceptance of our products. We have made no arrangements to obtain additional financing, and there is no assurance that such additional financing, if required or desired, will be available in amounts or on terms acceptable to us, if at all.

The following table details our line-of-credit facilities as of December 31, 2012:

Description	Available Principal	Interest Rate	Maturity	Security
U.S. Revolving Line of Credit(1)	Up to $35.0 million	LIBOR plus 1.125% to 1.625%, depending on our performance	June 2015	Unsecured
Euro Credit Facility (Germany)(2)	Euro 20.0 million ($26.4 million)	Euribor + 1.25% or EONIA 0.75%	June 2014	Unsecured, guaranteed by parent company
Euro Overdraft Facilities	Euro 1.9 million ($2.4 million)	1.3%-6.5%	October 2013	Common pool of assets of German and Italian subsidiaries

(1) $14.1 million of this credit facility is available to our foreign subsidiaries including those in India, China, Japan and South Korea. Total drawings at December 31, 2012 were $0.4 million with a weighted average interest rate of 1.3%.

(2) $17.2 million of this credit facility is available to our German subsidiary, $4.0 million is available to our Russian subsidiary and $5.2 million is available to our Italian subsidiary.

Our largest committed credit lines are with Bank of America and Deutsche Bank in the amounts of $35.0 million and $26.4 million, respectively, and neither of them is syndicated.

We are required to meet certain financial covenants associated with our U.S. revolving line of credit and long-term debt facilities. These covenants, tested quarterly, include a debt service coverage ratio and a funded debt to earnings before interest, taxes, depreciation and amortization ("EBITDA") ratio. The debt service coverage covenant requires that we maintain a trailing twelve month ratio of cash flow to debt service that is greater than 1.5:1. Debt service is defined as required principal and interest payments during the period. Cash

flow is defined as EBITDA less unfunded capital expenditures. The funded debt to EBITDA covenant requires that the sum of all indebtedness for borrowed money on a consolidated basis be less than two times our trailing twelve-month EBITDA. We were in compliance with all such financial covenants as of and for the year ended December 31, 2012.

The financial covenants in our loan documents may cause us to not take or to delay investments and actions that we might otherwise undertake because of limits on capital expenditures and amounts that we can borrow or lease. In the event that we do not comply with any of these covenants, we would be in default under the loan agreement or loan agreements, which may result in acceleration of the debt, cross-defaults on other debt or a reduction in available liquidity, any of which could harm our results of operations and financial condition.

In December 2010 and June 2011, we sold an aggregate 22.5% minority interest (the "Minority Interest") of our Russian subsidiary, NTO IRE-Polus ("NTO"), to the Russian Corporation for Nanotechnologies ("Rusnano") for an aggregate of $45.0 million. In addition, we had a call option commencing in December 2013 to buy back the Minority Interest at a predetermined value and Rusnano had a warrant to purchase an additional 2.5% interest in NTO and a put option commencing in December 2015 to sell its Minority Interest to us at a predetermined value. On June 29, 2012, we repurchased the Minority Interest for $55.4 million in cash and, under the terms of the agreement, the warrant and the put and call options were terminated. Due to the put rights, the Minority Interest was reported as a liability other than permanent equity under ASC 480-10-S99-3A. Based upon our valuation of the Minority Interest, the amount paid to repurchase the Minority Interest did not exceed its fair value. Accordingly, pursuant to ASC 480-10-S99-3A, we recorded the amount paid in excess of carrying amount in additional paid-in capital. See Note 7 to the Consolidated Financial Statements.

Operating activities. Net cash provided by operating activities increased by $87.9 million to $175.3 million in 2012 from $87.4 million in 2011, primarily resulting from:

- An increase in cash provided by net income after adding back non-cash charges of $41.3 million in 2012 as compared to $76.4 million in 2011 primarily related to an increase in net income;
- An increase in inventory of $23.0 million in 2012 compared to an increase of inventory of $56.1 million in 2011;
- A decrease in accrued expenses and other liabilities of $8.2 million in 2012 compared to a decrease of $6.8 million in 2011; and
- An increase in accounts receivable of $22.7 million in 2012 compared to an increase of $23.7 million in 2011.

Given our vertical integration, rigorous and time-consuming testing procedures for both internally manufactured and externally purchased components and the lead time required to manufacture components used in our finished products, the rate at which we turn inventory historically has been low when compared to our cost of sales. Also, our historical growth rates require investment in inventories to support future sales and enable us to quote short delivery times to our customers, which we believe provides us with a competitive advantage. Furthermore, if there is a disruption to the manufacturing capacity of any of our key technologies, our inventories of components should enable us to continue to build finished products for a reasonable period of time. We believe that we will continue to maintain a relatively high level of inventory compared to our cost of sales. As a result, we expect to have a significant amount of working capital invested in inventory. A reduction in our level of net sales or the rate of growth of our net sales from their current levels would mean that the rate at which we are able to convert our inventory into cash would decrease.

Deferred tax liabilities are not recorded for undistributed earnings of a foreign subsidiary that are deemed to be indefinitely reinvested in the foreign jurisdiction. Historically, we have reinvested the undistributed earnings of our foreign subsidiaries. We intend to continue to do this and keep such earnings indefinitely reinvested in the applicable tax jurisdictions.

Investing activities. Net cash used in investing activities was $55.3 million and $79.1 million in 2012 and 2011, respectively. The cash used in investing activities in 2012 related to the construction of new buildings in the United States, Germany and Russia as well as purchases of machinery and equipment and $11.6 million for the purchase of a laser micro-systems company during the third quarter of 2012. These expenditures were partially offset by the proceeds from the maturity of short-term investments of $25.5 million. In 2011, cash used in investing activities was related to the purchase of new buildings in Germany and Japan, the start of the construction of new buildings in Russia and purchases of machinery and equipment.

We expect to incur between $60 million to $70 million in capital expenditures, excluding acquisitions, in 2013. The timing and extent of any capital expenditures in and between periods can have a significant effect on our cash flows. Many of the capital expenditure projects that we undertake have long lead times and are difficult to cancel or defer to a later period.

Financing activities. Net cash provided by financing activities was $82.1 million and $31.9 million in 2012 and 2011, respectively. The cash provided by financing activities in 2012 was primarily related to the follow-on public stock offering for which we received $167.9 million, net of offering expenses. To a lesser extent, in 2012, cash was provided from stock option exercises and stock sales under our employee stock purchase plan. These were partially offset by the repurchase of a 22.5% redeemable noncontrolling interest in our Russian subsidiary of $55.4 million and a special dividend of $33.4 million to stockholders of record in December 2012. The cash provided by financing activities in 2011 was primarily related to cash received from Rusnano for a 10% interest in our Russian subsidiary and cash provided by the exercise of stock options and stock sales under our employee stock purchase plan.

Contractual Obligations

The following table describes our contractual obligations as of December 31, 2012 (in thousands).

	Payments Due in				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Operating lease obligations	$11,774	$ 3,467	$ 5,894	$2,384	$ 29
Purchase obligations	8,921	8,921	—	—	—
Long-term debt obligations (including interest)(1)	16,127	1,636	13,611	754	126
Contingent consideration	3,023	2,845	178	—	—
Total(2)	$39,845	$16,869	$19,683	$3,138	$155

(1) Interest for long-term debt obligations was calculated including the effect of our interest rate swaps. The effect of the interest rate swaps, which are accounted for as a cash flow hedge, are to fix the LIBOR component of the interest rate of the underlying floating rate loan at 4.1% and 2.6% for the term of the debt.

(2) Excludes obligations related to ASC 740 because we are unable to provide a reasonable estimate of the timing of future payments relating to the remainder of these obligations. See Note 14 to the Consolidated Financial Statements.

Recent Accounting Pronouncements

In June 2011, the FASB issued Accounting Standards Update ("ASU") No. 2011-05, "Comprehensive Income (Topic 220): Presentation of Comprehensive Income", which amended the current comprehensive income guidance. This accounting update eliminated the option to present the components of other comprehensive income as part of the statement of stockholders' equity. Instead, we must report comprehensive

income in either a single continuous statement of comprehensive income which contains two sections, net income and other comprehensive income, or in two separate but consecutive statements. We adopted ASU 2011-05 in the first quarter of 2012. This adoption did not have an impact on our statement of financial condition as it only required a change in the ordering of our financial statements.

The FASB subsequently issued ASU No. 2011-12, "Comprehensive Income (Topic 220): Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items out of Accumulated Other Comprehensive Income in ASU No. 2011-05". The amendments to the Codification in ASU No. 2011-12 became effective at the same time as the amendments in ASU No. 2011-05, Comprehensive Income, so that entities are not required to comply with the presentation requirements in ASU No. 2011-05 that ASU No. 2011-12 deferred. Entities should continue to report reclassifications out of accumulated other comprehensive income consistent with the presentation requirements in effect before ASU No. 2011-05. All other requirements in ASU No. 2011-5 were not affected by ASU No. 2011-12, including the requirement to report comprehensive income either in a single continuous financial statement or in two separate but consecutive financial statements.

Other accounting standards that have been issued or proposed by the FASB or other standards-setting bodies that do not require adoption until a future date are not expected to have a material impact on our financial statements upon adoption.

ITEM 7A. *QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK*

We are exposed to market risk in the ordinary course of business, which consists primarily of interest rate risk associated with our cash and cash equivalents and our debt and foreign exchange rate risk.

Interest rate risk. Our investments have limited exposure to market risk. To minimize this risk, we maintain a portfolio of cash, cash equivalents and short-term investments, consisting primarily of bank deposits, money market funds and short-term government funds. The interest rates are variable and fluctuate with current market conditions. Because of the short-term nature of these instruments, a sudden change in market interest rates would not be expected to have a material impact on our financial condition or results of operations.

Our exposure to market risk also relates to the increase or decrease in the amount of interest expense we must pay on our bank debt and borrowings on our bank credit facilities. The interest rate on our existing bank debt is effectively fixed except for our U.S. revolving line of credit. The rates on our Euro overdraft facilities in Germany and Italy and our Japanese Yen overdraft facility are fixed for twelve-month periods. Approximately 63% of our outstanding debt had a fixed rate of interest as of December 31, 2012. We do not believe that a 10% change in market interest rates would have a material impact on our financial position or results of operations.

Exchange rates. Due to our international operations, a significant portion of our net sales, cost of sales and operating expenses are denominated in currencies other than the U.S. dollar, principally the Euro, the Japanese Yen, the Chinese Yuan and the Russian Ruble. As a result, our international operations give rise to transactional market risk associated with exchange rate movements of the U.S. dollar, the Euro, the Japanese Yen, the Chinese Yuan and the Russian Ruble. Losses and gains on foreign exchange transactions totaled a $1.4 million loss in 2012 and a $2.9 million gain in 2011. Management believes that the use of foreign currency financial instruments reduces the risks of certain foreign currency transactions; however, these instruments provide only limited protection. We will continue to analyze our exposure to currency exchange rate fluctuations and may engage in additional financial hedging techniques in the future to attempt to minimize the effect of these potential fluctuations. Exchange rate fluctuations may adversely affect our financial results in the future. No foreign currency derivative instruments were outstanding at December 31, 2012.

ITEM 8. *FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA*

This information is incorporated by reference from pages F-1 through F-29 of this report.

ITEM 9. *CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE*

None.

ITEM 9A. *CONTROLS AND PROCEDURES*

Evaluation of Disclosure Controls and Procedures

Under the supervision of our Chief Executive Officer and our Chief Financial Officer, our management has evaluated the effectiveness of the design and operation of our "disclosure controls and procedures" (as defined in Rules 13a-15(e) and 15d-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act")), as of the end of the period covered by this Annual Report on Form 10-K (the "Evaluation Date"). Based upon that evaluation, our chief executive officer and our chief financial officer have concluded that, as of the Evaluation Date, our disclosure controls and procedures are effective to ensure that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Management's Annual Report on Internal Control Over Financial Reporting

Our management, including our Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and its subsidiaries. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our management conducted an assessment of the effectiveness of our internal control over financial reporting as of the Evaluation Date based on criteria established in "Internal Control—Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, our management concluded that, as of the Evaluation Date, our internal control over financial reporting was effective.

Our independent registered public accounting firm, Deloitte & Touche LLP, has audited our internal control over financial reporting, as stated in their report below.

Changes in Internal Controls

There was no change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Effectiveness of Controls

Our management (including our Chief Executive Officer and Chief Financial Officer) does not expect that the disclosure controls and procedures or internal control over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Due to the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, errors and instances of fraud, if any, within the company have been or will be detected.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
IPG Photonics Corporation
Oxford, MA

We have audited the internal control over financial reporting of IPG Photonics Corporation and subsidiaries (the "Company") as of December 31, 2012, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on the criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2012 of the Company and our report dated February 28, 2013 expressed an unqualified opinion on those financial statements.

/s/ Deloitte & Touche LLP

Boston, MA
February 28, 2013

ITEM 9B. *OTHER INFORMATION*

None.

PART III

ITEM 10. *DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE*

The information required hereunder is incorporated herein by reference to our definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the SEC within 120 days after December 31, 2012.

ITEM 11. *EXECUTIVE COMPENSATION*

The information required hereunder is incorporated herein by reference to our definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the SEC within 120 days after December 31, 2012.

ITEM 12. *SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS*

The information required hereunder is incorporated herein by reference to our definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the SEC within 120 days after December 31, 2012, with the exception of the information regarding securities authorized for issuance under our equity compensation plans, which is set forth in Item 5, "Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities Information Regarding Equity Compensation Plans" and is incorporated herein by reference.

ITEM 13. *CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE*

The information required hereunder is incorporated herein by reference to our definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the SEC within 120 days after December 31, 2012.

ITEM 14. *PRINCIPAL ACCOUNTING FEES AND SERVICES*

The information required hereunder is incorporated herein by reference to our definitive Proxy Statement to be filed pursuant to Regulation 14A, which Proxy Statement is anticipated to be filed with the SEC within 120 days after December 31, 2012.

PART IV

ITEM 15. *EXHIBITS AND FINANCIAL STATEMENT SCHEDULES*

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Financial Statements.

See Index to Financial Statements on page F-1.

(2) Financial Statement Schedules.

All schedules are omitted because they are not applicable or the required information is shown on the financial statements or notes thereto.

(3) The exhibits listed in the "Index to Exhibits" preceding the Exhibits attached hereto are filed with this Form 10-K or incorporated by reference as set forth therein.

(b) Exhibits.

See (a)(3) above.

(c) Additional Financial Statement Schedules.

All schedules are omitted because they are not applicable or the required information is shown on the financial statements or notes thereto.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 28, 2013.

IPG PHOTONICS CORPORATION

By: /s/ Valentin P. Gapontsev
Valentin P. Gapontsev
Chief Executive Officer and Chairman of the Board

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	
/s/ Valentin P. Gapontsev Valentin P. Gapontsev	Chief Executive Officer, Chairman of the Board and Director (Principal Executive Officer)	February 28, 2013
/s/ Timothy P.V. Mammen Timothy P.V. Mammen	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 28, 2013
/s/ Robert A. Blair Robert A. Blair	Director	February 28, 2013
/s/ Michael C. Child Michael C. Child	Director	February 28, 2013
/s/ Henry E. Gauthier Henry E. Gauthier	Director	February 28, 2013
/s/ William S. Hurley William S. Hurley	Director	February 28, 2013
/s/ Michael R. Kampfe Michael R. Kampfe	Director	February 28, 2013
/s/ William F. Krupke William F. Krupke	Director	February 28, 2013
/s/ John Peeler John Peeler	Director	February 28, 2013
/s/ Igor Samartsev Igor Samartsev	Director	February 28, 2013
/s/ Eugene Scherbakov Eugene Scherbakov	Director	February 28, 2013

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
IPG Photonics Corporation
Oxford, Massachusetts

We have audited the accompanying consolidated balance sheets of IPG Photonics Corporation and subsidiaries (the "Company") as of December 31, 2012 and 2011, and the related consolidated statements of income, comprehensive income, equity and cash flows for each of the three years in the period ended December 31, 2012. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the financial statements based on our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2012, based on the criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 28, 2013 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
February 28, 2013

IPG PHOTONICS CORPORATION

CONSOLIDATED BALANCE SHEETS

	December 31, 2012	December 31, 2011
	(In thousands, except share and per share data)	
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$384,053	$180,234
Short-term investments	—	25,451
Accounts receivable, net	96,630	75,755
Inventories	139,618	116,978
Prepaid income taxes and income taxes receivable	13,071	13,285
Prepaid expenses and other current assets	18,639	11,855
Deferred income taxes, net	12,948	10,899
Total current assets	664,959	434,457
DEFERRED INCOME TAXES, NET	2,107	4,830
GOODWILL	2,898	—
INTANGIBLE ASSETS, NET	7,510	6,157
PROPERTY, PLANT AND EQUIPMENT, NET	210,563	155,202
OTHER ASSETS	7,461	7,486
TOTAL	$895,498	$608,132
LIABILITIES AND EQUITY		
CURRENT LIABILITIES:		
Revolving line-of-credit facilities	$ 2,442	$ 7,057
Current portion of long-term debt	1,505	1,613
Accounts payable	17,783	11,122
Accrued expenses and other liabilities	51,451	47,285
Deferred income taxes, net	9,831	5,405
Income taxes payable	42,443	21,230
Total current liabilities	125,455	93,712
DEFERRED INCOME TAXES AND OTHER LONG-TERM LIABILITIES	13,102	8,961
LONG-TERM DEBT, NET OF CURRENT PORTION	14,014	15,726
Total liabilities	152,571	118,399
REDEEMABLE NONCONTROLLING INTERESTS	—	46,123
COMMITMENTS AND CONTINGENCIES		
IPG PHOTONICS CORPORATION STOCKHOLDERS' EQUITY:		
Common stock, $0.0001 par value, 175,000,000 shares authorized; 51,359,247 and 47,616,115 shares issued and outstanding at December 31, 2012 and 2011, respectively	5	5
Additional paid-in capital	511,039	332,585
Retained earnings	234,977	122,833
Accumulated other comprehensive loss	(3,094)	(12,100)
Total IPG Photonics Corporation stockholders' equity	742,927	443,323
NONCONTROLLING INTERESTS	—	287
Total equity	742,927	443,610
TOTAL	$895,498	$608,132

See notes to consolidated financial statements.

IPG PHOTONICS CORPORATION

CONSOLIDATED STATEMENTS OF INCOME

	Year Ended December 31,		
	2012	2011	2010
	(in thousands, except per share data)		
NET SALES	$562,528	$474,482	$299,256
COST OF SALES	257,801	217,227	152,798
GROSS PROFIT	304,727	257,255	146,458
OPERATING EXPENSES:			
Sales and marketing	23,845	21,731	19,100
Research and development	31,401	25,422	19,160
General and administrative	39,231	37,442	28,645
Loss (gain) on foreign exchange	1,362	(2,862)	(848)
Total operating expenses	95,839	81,733	66,057
OPERATING INCOME	208,888	175,522	80,401
OTHER INCOME (EXPENSE), Net:			
Interest income (expense), net	319	(681)	(1,188)
Other income (expense), net	8	(257)	39
Total other income (expense)	327	(938)	(1,149)
INCOME BEFORE PROVISION FOR INCOME TAXES	209,215	174,584	79,252
PROVISION FOR INCOME TAXES	(61,471)	(53,575)	(24,900)
NET INCOME	147,744	121,009	54,352
LESS: NET INCOME ATTRIBUTABLE TO NONCONTROLLING INTERESTS	2,740	3,250	361
NET INCOME ATTRIBUTABLE TO IPG PHOTONICS CORPORATION	$145,004	$117,759	$ 53,991
NET INCOME ATTRIBUTABLE TO IPG PHOTONICS CORPORATION PER SHARE:			
Basic	$ 2.87	$ 2.48	$ 1.16
Diluted	$ 2.81	$ 2.41	$ 1.13
WEIGHTED AVERAGE SHARES OUTSTANDING:			
Basic	50,477	47,365	46,424
Diluted	51,536	48,685	47,594

See notes to consolidated financial statements.

IPG PHOTONICS CORPORATION

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Year Ended December 31,		
	2012	2011	2010
		(In thousands)	
Net income	$147,744	$121,009	$ 54,352
Other comprehensive income (loss), net of tax:			
Foreign currency translation gain (loss)	11,225	(15,167)	(10,662)
Change in carrying value of auction rate securities	—	232	(27)
Unrealized gain (loss) on derivatives	241	(42)	—
Total other comprehensive income (loss)	11,466	(14,977)	(10,689)
Comprehensive income	159,210	106,032	43,663
Comprehensive income (loss) attributable to noncontrolling interest and redeemable noncontrolling interest	1,908	1,183	(32)
Comprehensive income attributable to IPG Photonics Corporation	$157,302	$104,849	$ 43,695

See notes to consolidated financial statements.

IPG PHOTONICS CORPORATION

CONSOLIDATED STATEMENTS OF EQUITY

	Year Ended December 31,					
	2012		2011		2010	
	Shares	Amount	Shares	Amount	Shares	Amount
	(In thousands, except share and per share data)					
COMMON STOCK						
Balance, beginning of year	47,616,115	$ 5	46,988,566	$ 5	46,076,472	$ 5
Exercise of stock options	456,919	—	595,448	—	865,123	—
Common stock issued under employee stock purchase plan	36,213	—	32,101	—	46,971	—
Common stock issued in a public offering	3,250,000	—	—	—	—	—
Balance, end of period	51,359,247	5	47,616,115	5	46,988,566	5
ADDITIONAL PAID-IN CAPITAL						
Balance, beginning of year		332,585		310,218		293,743
Stock-based compensation		8,565		8,048		3,196
Exercise of stock options and related tax benefit from exercise		8,954		12,423		13,138
Common stock issued under employee stock purchase plan		1,205		879		603
Fair value of warrant transferred to additional paid-in capital upon exercise		—		674		—
(Purchase) sale of redeemable noncontrolling interests ("NCI")		(7,794)		10,138		15,892
Increase redeemable NCI to initial redemption value		—		(9,795)		(16,285)
Common stock issued in follow-on public offering		167,928		—		—
Premium on purchase of NCI		(404)		—		(69)
Balance, end of period		511,039		332,585		310,218
RETAINED EARNINGS						
Balance, beginning of year		122,833		5,567		(48,424)
Net income attributable to IPG Photonics Corporation		145,004		117,759		53,991
Adjustments to redemption value of redeemable NCI		493		(493)		—
Dividend to shareholders		(33,353)		—		—
Balance, end of period		234,977		122,833		5,567
ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)						
Balance, beginning of year		(12,100)		810		11,106
Foreign currency translation gain (loss)		11,225		(15,167)		(10,662)
Unrealized gain (loss) on derivatives, net of tax		241		(42)		(27)
Change in carrying value of auction rate securities		—		232		—
Purchase of NCI and redeemable NCI		(3,292)		—		—
Attribution to NCI and redeemable NCI		832		2,067		393
Balance, end of period		(3,094)		(12,100)		810
TOTAL IPG PHOTONICS CORPORATION STOCKHOLDERS' EQUITY		742,927		443,323		316,600
NONCONTROLLING INTERESTS						
Balance, beginning of year		287		203		141
Net income attributable to NCI		—		94		361
Other comprehensive income (loss) attributable to NCI		9		(10)		—
Sale of NCI		(700)		—		(92)
Net income attributable to redeemable NCI		—		—		(276)
Premium on purchase of NCI		404		—		69
Discount on purchase of NCI		—		—		—
Balance, end of period		—		287		203
TOTAL EQUITY		$742,927		$443,610		$316,803

See notes to consolidated financial statements.

IPG PHOTONICS CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2012	2011	2010
	(In thousands)		
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income	$147,744	$121,009	$ 54,352
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	26,144	23,962	21,845
Deferred income taxes	5,546	(288)	401
Stock-based compensation	8,565	8,048	3,196
Losses (gains) on foreign currency transactions	1,250	(764)	(888)
Other	(19)	565	1,184
Provisions for inventory, warranty and bad debt	19,967	15,346	11,377
Changes in assets and liabilities that provided (used) cash:			
Accounts receivable	(22,706)	(23,688)	(27,308)
Inventories	(22,975)	(56,139)	(27,018)
Prepaid expenses and other current assets	(899)	(770)	(4,707)
Accounts payable	4,375	1,985	3,411
Accrued expenses and other liabilities	(8,155)	(6,811)	22,119
Income and other taxes payable	21,118	12,929	12,911
Tax benefit from exercise of employee stock options	(4,679)	(8,033)	(7,443)
Net cash provided by operating activities	175,276	87,351	63,432
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of property, plant and equipment	(68,184)	(53,007)	(28,374)
Proceeds from short-term investments	25,451		
Purchases of short-term investments	—	(25,451)	—
Acquisition of businesses, net of cash acquired	(11,596)	(750)	(4,108)
Other	(928)	109	(77)
Net cash used in investing activities	(55,257)	(79,099)	(32,559)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from line-of-credit facilities	12,760	10,673	13,828
Payments on line-of-credit facilities	(17,190)	(10,630)	(13,086)
Purchase of noncontrolling interests ("NCI")	(700)	—	(92)
Principal payments on long-term borrowings	(2,117)	(1,432)	(1,333)
(Purchase) sale of redeemable NCI	(55,400)	19,972	24,806
Exercise of employee stock options and issuances under employee stock purchase plan	5,480	5,268	6,298
Tax benefit from exercise of employee stock options	4,679	8,034	7,443
Proceeds from follow-on public offering, net of offering expenses	167,928	—	—
Distributions to shareholders	(33,353)	—	—
Other	—	—	(100)
Net cash provided by financing activities	82,087	31,885	37,764
EFFECT OF CHANGES IN EXCHANGE RATES ON CASH AND CASH EQUIVALENTS	1,713	(7,763)	(3,697)
NET INCREASE IN CASH AND CASH EQUIVALENTS	203,819	32,374	64,940
CASH AND CASH EQUIVALENTS — Beginning of period	180,234	147,860	82,920
CASH AND CASH EQUIVALENTS — End of period	$384,053	$180,234	$147,860
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:			
Cash paid for interest	$ 864	$ 1,089	$ 998
Income taxes paid	$ 25,980	$ 39,199	$ 7,417
Non-cash transactions:			
Demonstration units transferred from inventory to other assets	$ 2,631	$ 3,784	$ 1,620
Property purchase financed with debt	$ —	$ 1,833	$ —
Additions to property, plant and equipment included in accounts payable	$ 2,071	$ 484	$ 407
Gain on sale of property, plant and equipment offset by related notes	$ 322	$ —	$ —
Amounts related to acquisition of businesses included in accounts payable and accrued expenses and other liabilities	$ —	$ —	$ 1,120

See notes to consolidated financial statements.

IPG PHOTONICS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share data)

1. NATURE OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Business — IPG Photonics Corporation (the "Company") is the leading developer and manufacturer of a broad line of high-performance fiber lasers, fiber amplifiers and diode lasers that are used for diverse applications, primarily in materials processing. Its world headquarters are located in Oxford, Massachusetts. It also has facilities and sales offices elsewhere in the United States, Europe and Asia.

Principles of Consolidation — The Company was incorporated as a Delaware corporation in December 1998. The accompanying financial statements include the accounts of the Company and its majority-owned subsidiaries. All intercompany accounts and transactions have been eliminated.

Use of Estimates — The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Actual results could differ from those estimates.

Foreign Currency — The financial information for entities outside the United States is measured using local currencies as the functional currency. Assets and liabilities are translated into U.S. dollars at the exchange rate in effect on the respective balance sheet dates. Income and expenses are translated into U.S. dollars based on the average rate of exchange for the corresponding period. Exchange rate differences resulting from translation adjustments are accounted for directly as a component of accumulated other comprehensive (loss) income.

Cash and Cash Equivalents and Short-Term Investments — Cash and cash equivalents consist primarily of highly liquid investments, such as bank deposits, marketable securities with original maturities of three months or less with insignificant interest rate risk and marketable securities with remaining maturities of three months or less at the date of acquisition. Short-term investments consisted primarily of similar highly liquid investments, such as bank deposits and marketable securities with remaining maturities greater than three months.

Inventories — Inventories are stated at the lower of cost or market on a first-in, first-out basis. Inventories include parts and components that may be specialized in nature and subject to rapid obsolescence. The Company periodically reviews the quantities and carrying values of inventories to assess whether the inventories are recoverable. Because of the Company's vertical integration, a significant or sudden decrease in sales activity could result in a significant change in the estimates of excess or obsolete inventory valuation. The costs associated with provisions for excess quantities, technological obsolescence, or component rejections are charged to cost of sales as incurred.

Property, Plant and Equipment — Property, plant and equipment are stated at cost, less accumulated depreciation. Depreciation is determined using the straight-line method based on the estimated useful lives of the related assets. In the case of leasehold improvements, the estimated useful lives of the related assets do not exceed the remaining terms of the corresponding leases. The following table presents the assigned economic useful lives of property, plant and equipment:

Category	Economic Useful Life
Buildings	30 years
Machinery and equipment	3-5 years
Office furniture and fixtures	3-5 years

Expenditures for maintenance and repairs are charged to operations. Interest expense associated with significant capital projects is capitalized as a cost of the project. The Company capitalized $142, $46 and $18 of interest expense in 2012, 2011 and 2010, respectively.

Long-Lived Assets — Long-lived assets, which consist primarily of property, plant and equipment, are reviewed by management for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. In cases in which undiscounted expected future cash flows are less than the carrying value, an impairment loss is recorded equal to the amount by which the carrying value exceeds the fair value of assets. No impairment losses have been recorded during the periods presented.

Included in other long-term assets is certain demonstration equipment. The demonstration equipment is amortized over the respective estimated economic lives, generally 3 years. The carrying value of the demonstration equipment totaled $4,931 and $3,799 at December 31, 2012 and 2011, respectively. Amortization expense of demonstration equipment for the years ended December 31, 2012, 2011 and 2010, was $2,797, $2,920 and $3,690, respectively.

Goodwill — Goodwill is the amount by which the cost of the acquired net assets in a business acquisition exceeded the fair values of the net identifiable assets on the date of purchase. Goodwill is not amortized in accordance with the requirements of Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 350, Intangibles-Goodwill and Other ("FASB ASC 350"). Goodwill is assessed for impairment at least annually, on a reporting unit basis, or more frequently when events and circumstances occur indicating that the recorded goodwill may be impaired. If the book value of a reporting unit exceeds its fair value, the implied fair value of goodwill is compared with the carrying amount of goodwill. If the carrying amount of goodwill exceeds the implied fair value, an impairment loss is recorded in an amount equal to that excess.

Intangible Assets — Intangible assets result from the Company's various business acquisitions. Intangible assets are reported at cost, net of accumulated amortization, and are amortized on a straight-line basis either over their estimated useful lives of five to ten years or over the period the economic benefits of the intangible asset are consumed.

Revenue Recognition — The Company recognizes revenue in accordance with FASB ASC 605. Revenue from orders with multiple deliverables is divided into separate units of accounting when certain criteria are met. These separate units generally consist of equipment and installation. The consideration for the arrangement is allocated to the separate units of accounting based on their relative selling prices. The selling price of equipment is based on vendor-specific objective evidence and the selling price of installation is based on third-party evidence. Applicable revenue recognition criteria are applied separately for each separate unit of accounting. Equipment revenue generally is recognized upon the transfer of ownership which is typically at the time of shipment. Installation revenue is recognized upon completion of the installation service, which typically occurs within 30 to 90 days of delivery. Returns and customer credits are infrequent and are recorded as a reduction to revenue. Rights of return generally are not included in sales arrangements.

Allowance for Doubtful Accounts — The Company maintains an allowance for doubtful accounts to provide for the estimated amount of accounts receivable that will not be collected. The allowance is based upon an assessment of customer creditworthiness, historical payment experience and the age of outstanding receivables.

(In thousands, except share and per share data)

Activity related to the allowance for doubtful accounts was as follows:

	2012	2011	2010
Balance at January 1	$ 1,605	$ 2,143	$1,256
Provision for bad debts	3,623	2,505	1,951
Recoveries	(2,981)	(2,724)	(770)
Uncollectable accounts written off	(170)	(309)	(229)
Foreign currency translation	96	(10)	(65)
Balance at December 31	$ 2,173	$ 1,605	$2,143

Warranties — In general, the Company's products carry a warranty against defect for a period of one to three years, depending upon the product type and customer negotiations. The expected cost associated with these warranty obligations is recorded when the revenue is recognized. The warranty accrual is reflected in accrued expenses and other liabilities and in other long-term liabilities in the consolidated balance sheets. Activity related to the warranty accrual was as follows:

	2012	2011	2010
Balance at January 1	$ 8,631	$ 6,917	$ 3,886
Provision for warranty accrual	8,112	6,701	6,681
Warranty claims and other reductions	(6,542)	(4,692)	(3,476)
Foreign currency translation and other	513	(295)	(174)
Balance at December 31	$10,714	$ 8,631	$ 6,917

Accrued warranty reported in the accompanying balance sheets as of December 31, 2012 and 2011 consists of $7,838 and $6,186, respectively, in accrued expenses and other liabilities and $2,876 and $2,445, respectively, in other long-term liabilities.

Advertising Expense — The cost of advertising is expensed as incurred. The Company conducts substantially all of its sales and marketing efforts through trade shows, professional and technical conferences, direct sales and our website. The Company's advertising costs were not material for the periods presented.

Research and Development — Research and development costs are expensed as incurred.

Income Taxes — Deferred tax assets and liabilities are recognized for the future tax consequences of temporary differences between the financial statement carrying amounts and tax basis of assets and liabilities and net operating loss carryforwards and credits using enacted rates in effect when those differences are expected to reverse. Valuation allowances are provided against deferred tax assets that are not deemed to be recoverable. The Company recognizes tax positions that are more likely than not to be sustained upon examination by relevant tax authorities. The tax positions are measured at the greatest amount of tax benefit that is more than 50 percent likely to be realized upon ultimate settlement.

The Company provides reserves for potential payments of tax to various tax authorities related to uncertain tax positions and other issues. The reserves are based on a determination of whether and how much of a tax benefit taken by it in its tax filings or positions is more likely than not to be realized following resolution of uncertainties related to the tax benefit, assuming that the matter in question will be raised by the tax authorities.

Concentration of Credit Risk — Financial instruments that potentially subject the Company to credit risk consist primarily of cash and cash equivalents, auction rate securities and accounts receivable. The Company

(In thousands, except share and per share data)

maintains substantially all of its cash and marketable securities in six financial institutions, which it believes to be high-credit quality financial institutions. The Company grants credit to customers in the ordinary course of business and provide a reserve for potential credit losses. Such losses historically have been within management's expectations (see discussion related to significant customers in Note 15).

Fair Value of Financial Instruments — The Company's financial instruments consist of cash equivalents, accounts receivable, auction rate securities, accounts payable, drawings on revolving lines of credit, long-term debt and certain derivative instruments.

The valuation techniques used to measure fair value are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect internal market assumptions. These two types of inputs create the following fair value hierarchy: Level 1, defined as observable inputs such as quoted prices for identical instruments in active markets; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs for which little or no market data exists, therefore requiring an entity to develop its own assumptions.

The carrying amounts of cash equivalents, accounts receivable, accounts payable and drawings on revolving lines of credit are considered reasonable estimates of their fair market value, due to the short maturity of these instruments or as a result of the competitive market interest rates, which have been negotiated.

The following table presents information about the Company's assets and liabilities measured at fair value:

		Fair Value Measurements at December 31, 2012		
	Total	Level 1	Level 2	Level 3
Assets				
Money market funds	$ 58,219	$ 58,219	$ —	$ —
Treasury bills	159,007	159,007	—	—
Time deposits	19,823	19,823	—	—
Auction rate securities	1,112	—	—	1,112
Total assets	$238,161	$237,049	$ —	$1,112
Liabilities				
Contingent purchase consideration	$ 3,023	$ —	$ —	$3,023
Interest rate swaps	855	—	855	—
Total liabilities	$ 3,878	$ —	$ 855	$3,023

(In thousands, except share and per share data)

	Total	Fair Value Measurements at December 31, 2011		
		Level 1	Level 2	Level 3
Assets				
Money market funds	$ 18,466	$ 18,466	$ —	$ —
Treasury bills	58,994	58,994	—	—
Time deposits	33,513	33,513	—	—
Auction rate securities	1,104	—	—	1,104
Total assets	$112,077	$110,973	$ —	$1,104
Liabilities				
Contingent purchase consideration	$ 999	$ —	$ —	$ 999
Warrant	77	—	—	77
Interest rate swaps	1,223	—	1,223	—
Total liabilities	$ 2,299	$ —	$1,223	$1,076

Money market funds, treasury bills and time deposits are included in cash and cash equivalents and short-term investments and auction rate securities are included in other assets.

The interest rate swaps are designated as cash flow hedges the fair value of which was estimated based on quoted market prices or pricing models using current market rates. Fair value at December 31, 2012 and 2011 for the auction rate securities considered prices observed in inactive secondary markets for the securities held by the Company.

On August 31, 2012, the Company acquired the working capital and long-term assets of JP Sercel Associates, Inc. In addition to cash paid, consideration includes contingent consideration based on sales targets that extend for two one-year periods that became effective October 1, 2012. Total possible additional payouts under these earn-outs are $18,500. The Company has accrued a liability of $2,452 related to these contingencies. The fair value of the accrued contingent consideration incurred was determined using an income approach at the acquisition date and reporting date. That approach is based on significant inputs that are not observable in the market. Key assumptions include assessing the probability of meeting certain milestones required to earn the contingent consideration.

The Company completed the acquisition of Multilane Technology through its Italian subsidiary during 2011, and the acquisitions of Photonics Innovations, Inc., and Cosytronic, KG during 2010. The fair value of the accrued contingent consideration incurred during these acquisitions was determined using an income approach at the acquisition date and reporting date. That approach is based on significant inputs that are not observable in the market. Key assumptions include assessing the probability of meeting certain milestones required to earn the contingent consideration. As of December 31, 2012, the Company has accrued a liability of $571 for the estimated fair value of contingent consideration expected to be payable upon the acquired companies reaching specific performance metrics over the next four years of operation. As of December 31, 2012, the ranges of outcomes and key assumptions have not changed materially.

As of December 31, 2012, the ranges of outcomes and key assumptions have not changed materially. Auction rate securities and contingent consideration are measured at fair value on a recurring basis using significant unobservable inputs (Level 3). The fair value of the auction rate securities was determined using prices observed in inactive secondary markets for the securities held by the Company. The fair value of the accrued contingent consideration incurred was determined using an income approach at the acquisition date and

(In thousands, except share and per share data)

reporting date. That approach is based on significant inputs that are not observable in the market. Key assumptions include assessing the probability of meeting certain milestones required to earn the contingent consideration.

The auction rate securities are considered available-for-sale securities. They had a cost basis of $1,450 at December 31, 2012 and 2011. Other-than-temporary impairments recorded in other (expense) income, net were $0, $49 and $338 in 2012, 2011 and 2010, respectively.

During the year ended December 31, 2012, the Company terminated the warrant held by Rusnano as part of the redemption of Rusnano's redeemable noncontrolling interest.

	2012	2011
Auction Rate Securities		
Balance, January 1	$ 1,104	$ 921
Period transactions	—	—
Change in fair value	8	183
Balance, December 31	$ 1,112	$1,104
Contingent Purchase Consideration		
Balance, January 1	$ 999	$ 685
Period transactions	2,444	282
Adjustment for determination of final payment	987	—
Change in fair value and currency fluctuations	10	32
Settlements and payments	$(1,417)	$ —
Balance, December 31	$ 3,023	$ 999
Warrant		
Balance, January 1	$ 77	$ 180
Period transactions	(77)	(674)
Change in fair value	—	571
Balance, December 31	$ —	$ 77

Comprehensive Income — Comprehensive income includes charges and credits to equity that are not the result of transactions with stockholders. Included within comprehensive income is the cumulative foreign currency translation adjustment and unrealized gains or losses on derivatives. These adjustments are accumulated within the consolidated statements of comprehensive income.

Total components of accumulated other comprehensive loss were as follows:

	December 31,	
	2012	2011
Foreign currency translation adjustments	$(2,802)	$(14,027)
Unrealized loss on derivatives, net of tax of $331 and $458	(524)	(765)
Change in carrying value of auction rate securities	232	232
Attribution to NCI and redeemable NCI	3,292	2,460
Purchase of NCI and redeemable NCI	(3,292)	—
Accumulated other comprehensive loss	$(3,094)	$(12,100)

(In thousands, except share and per share data)

Derivative Instruments — The Company's primary market exposures are to interest rates and foreign exchange rates. The Company may use certain derivative financial instruments to help manage these exposures. The Company executes these instruments with financial institutions it judges to be credit-worthy. The Company does not hold or issue derivative financial instruments for trading or speculative purposes.

The Company recognizes all derivative financial instruments as either assets or liabilities at fair value in the consolidated balance sheets. The Company has used foreign currency forward contracts as cash flow hedges of forecasted intercompany settlements denominated in foreign currencies of major industrial countries. The Company has no outstanding foreign currency forward contracts. The Company has interest rate swaps that are classified as a cash flow hedge of its variable rate debt. The Company has no derivatives that are not accounted for as a hedging instrument.

Cash Flow Hedges — The Company's cash flow hedges consist of interest rate swaps under which it agrees to pay fixed rates of interest. All of the Company's derivatives are accounted for as hedging instruments. The fair value amounts in the consolidated balance sheets at December 31, 2012 and 2011, were:

	Notional Amounts[1]		Other Assets		Deferred Income Taxes And Other Long-Term Liabilities	
	December 31,		December 31,		December 31,	
	2012	2011	2012	2011	2012	2011
Interest rate swap(s)	$14,000	$15,333	$—	$—	$855	$1,223
Total	$14,000	$15,333	$—	$—	$855	$1,223

(1) Notional amounts represent the gross contract/notional amount of the derivatives outstanding.

The derivative gains and losses in the consolidated statements of income for the years ended December 31, 2012, 2011 and 2010, related to the Company's interest rate swap contracts were as follows:

	Year Ended December 31,		
	2012	2011	2010
Effective portion recognized in other comprehensive income (loss), pretax:			
Interest rate swap	$ 944	$ 562	$ 649
Effective portion reclassified from other comprehensive income (loss) to interest expense, pretax:			
Interest rate swap	$(576)	$(629)	$(679)
Ineffective portion recognized in income:			
Interest rate swap	$ —	$ —	$ —

The Company made no adjustments to the fair value of this derivative as a result of evaluating counterparty risk.

Business Segment Information — The Company operates in one segment which involves the design, development, production and distribution of fiber lasers, fiber amplifiers, and related optical components. The Company has a single, company-wide management team that administers all properties as a whole rather than as discrete operating segments. The chief decision maker, who is the Company's chief executive officer, measures

financial performance as a single enterprise and not on legal entity or end-market basis. Throughout the year, the chief decision maker allocates capital resources on a project-by-project basis across the Company's entire asset base to maximize profitability without regard to legal entity or end-market basis. The Company operates in a number of countries throughout the world in a variety of product lines. Information regarding geographic financial information and product lines is provided in Note 15.

Earnings Per Share — The Company computes net income per share in accordance with ASC 260—Earnings Per Share. Under the provisions of ASC 260, basic net income per share is computed by dividing the net income available to common stockholders by the weighted-average common shares outstanding during the period. Diluted net income per common share adjusts basic net income per common share for the effects of stock options and restricted stock units only in periods in which such effect is dilutive. ASC 260 also requires the Company to present basic and diluted earnings per share information separately for each class of equity instruments that participate in any income distribution with primary equity instruments. The Company calculates earnings per share in periods where a class of common stock was redeemable for other than fair value through the application of the two-class method. The computation of net income per share is provided in Note 9.

Recent Accounting Pronouncements — In June 2011, the FASB issued ASU No. 2011-05, "Comprehensive Income (Topic 220): Presentation of Comprehensive Income," which amended the comprehensive income guidance. This accounting update eliminated the option to present the components of other comprehensive income as part of the statement of stockholders' equity. Instead, the Company must report comprehensive income in either a single continuous statement of comprehensive income which contains two sections, net income and other comprehensive income, or in two separate but consecutive statements. The Company adopted ASU 2011-05 in the first quarter of 2012. This adoption did not have a material impact on the Company's consolidated financial statements as it only required a change in the ordering of its financial statements.

The FASB subsequently issued ASU No. 2011-12, "Comprehensive Income (Topic 220): Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items out of Accumulated Other Comprehensive Income in ASU No. 2011-05." The amendments to the Codification in ASU No. 2011-12 became effective at the same time as the amendments in ASU No. 2011-05, Comprehensive Income, so that entities are not required to comply with the presentation requirements in ASU No. 2011-05 that ASU No. 2011-12 deferred. Entities should continue to report reclassifications out of accumulated other comprehensive income consistent with the presentation requirements in effect before ASU No. 2011-05. All other requirements in ASU No. 2011-5 were not affected by ASU No. 2011-12, including the requirement to report comprehensive income either in a single continuous financial statement or in two separate but consecutive financial statements.

Other accounting standards that have been issued or proposed by the FASB or other standards-setting bodies that do not require adoption until a future date are not expected to have a material impact on the Company's financial statements upon adoption.

Subsequent Events — The Company has considered the impact of subsequent events through the filing date of these financial statements.

(In thousands, except share and per share data)

2. STOCK-BASED COMPENSATION

Stock-based compensation is included in the following financial statement captions:

	Year Ended December 31,		
	2012	2011	2010
Cost of sales	$ 2,184	$ 1,731	$ 727
Sales and marketing	1,052	1,503	801
Research and development	1,327	1,036	446
General and administrative	4,002	3,778	1,222
Total stock-based compensation	8,565	8,048	3,196
Tax benefit recognized	(2,629)	(2,551)	(973)
Net stock-based compensation	$ 5,936	$ 5,497	$2,223

Compensation cost for all share-based payment awards is based on the estimated grant-date fair value. The Company allocates and records stock-based compensation expense on a straight-line basis over the requisite service period.

The Company calculates the fair value of stock option grants using the Black-Scholes option pricing model. Determining the appropriate fair value model and calculating the fair value of stock-based payment awards require the use of highly subjective assumptions, including the expected life of the stock-based payment awards and stock price volatility. The assumptions used in calculating the fair value of stock-based payment awards represent management's best estimates, but the estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and the Company uses different assumptions, its stock-based compensation expense could be materially different in the future. The weighted average assumptions used in the Black-Scholes model or the calculation of compensation were as follows for the years ended December 31.

	2012	2011	2010
Expected term	4.0-6.6 years	3.4-6.9 years	2.9-5.9 years
Volatility	49%-56%	46%-56%	42%-48%
Risk-free rate of return	0.59%-1.23%	0.48%-2.82%	0.34%-2.68%
Dividend yield	0%	0%	0%
Forfeiture rate	0%-6.1%	0%-6.26%	0%-5.0%

Incentive Plans — In April 2000, the Company's board of directors adopted the 2000 Incentive Compensation Plan (the "2000 Plan"), and in February 2006, the Company's board of directors adopted the 2006 Incentive Compensation Plan (the "2006 Plan"), which provide for the issuance of stock options and other stock and non-stock based awards to the Company's directors, employees, consultants and advisors. The Company reserved 5,833,333 shares under the 2000 Plan and 4,000,000 shares under the 2006 Plan for the issuance of awards under the plans. During 2011, the Company reserved an additional 6,084,273 shares under the 2006 Plan. In June 2006, the Company's board of directors adopted the Non-Employee Directors Stock Plan (the "Directors Plan"). Only non-employee directors are eligible to receive awards under the Directors Plan. The Company reserved 486,660 shares for issuance under the Directors Plan. Under the three plans, the Company may grant nonstatutory stock options at an exercise price at least equal to the fair value of its common stock on the date of grant, unless the board of directors or compensation committee determines otherwise on the date of grant. Incentive stock options may be granted under the 2000 Plan and the 2006 Plan at exercise prices equal to or exceeding the fair value of the common stock on the date of grant. The Company may also grant restricted stock, restricted stock units and other equity-based awards. Incentive awards generally become exercisable over periods

of one to five years and expire seven to ten years from the date of the grant. The awards under the 2000 Plan and the 2006 Plan may become exercisable earlier upon the occurrence of certain change of control events at the election of the board of directors or compensation committee, and all awards under the Directors Plan automatically become exercisable upon a change of control. All shares issued under the stock option plans are registered shares newly issued by the Company. At December 31, 2012, options to purchase 6,465,903 shares of the Company's stock were available for future grant under the three option plans.

A summary of option activity, including the employee stock purchase plan, is presented below (see Note 11 for further information):

	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life	Aggregate Intrinsic Value
			(In years)	(In thousands)
Outstanding — January 1, 2012	2,724,572	$20.78		
Granted	580,616	56.41		
Exercised	(460,207)	9.83		
Forfeited	(55,229)	37.04		
Outstanding — December 31, 2012	2,789,752	$29.50	6.79	$106,746
Vested or expected to vest — December 31, 2012	2,643,428	$28.38	6.69	$104,037
Exercisable — December 31, 2012	1,048,715	$13.80	4.73	$ 55,811

The intrinsic value of the options exercised during the years ended December 31, 2012, 2011 and 2010, was $20,792, $29,265 and $13,431, respectively.

The weighted-average grant fair value for options granted during the years ended December 31, 2012, 2011 and 2010, was $26.80, $27.60 and $7.66, respectively.

The total compensation cost related to nonvested awards not yet recorded at December 31, 2012 was $21,553 which is expected to be recognized over a weighted average of 3.2 years.

The fair value of awards vested during the year ended December 31, 2012 was $5,511.

3. INVENTORIES

Inventories consist of the following:

	December 31,	
	2012	2011
Components and raw materials	$ 53,436	$ 41,107
Work-in-process	46,240	40,380
Finished goods	39,942	35,491
Total	$139,618	$116,978

(In thousands, except share and per share data)

The Company recorded inventory provisions to cost of sales totaling $8,232, $6,139 and $2,745 in 2012, 2011 and 2010, respectively. These provisions were recorded as a result of uncertainties related to the recoverability of the value of inventories due to technological changes and excess quantities. These provisions are reported as a reduction to components and raw materials and finished goods.

4. PROPERTY, PLANT AND EQUIPMENT

Property, plant, and equipment consist of the following:

	December 31,	
	2012	2011
Land	$ 17,303	$ 16,168
Buildings	109,288	96,556
Machinery and equipment	135,756	110,331
Office furniture and fixtures	22,446	18,268
Construction-in-progress	52,457	20,953
Total property, plant and equipment	337,250	262,276
Accumulated depreciation	(126,687)	(107,074)
Total property, plant and equipment — net	$ 210,563	$ 155,202

The Company recorded depreciation expense of $21,108, $18,796 and $16,212 in 2012, 2011 and 2010, respectively.

5. ACCRUED EXPENSES AND OTHER LIABILITIES

Accrued expenses and other liabilities consist of the following:

	December 31,	
	2012	2011
Accrued compensation	$21,972	$21,453
Customer deposits and deferred revenue	17,174	15,317
Current portion of accrued warranty	7,838	6,186
Other	4,467	4,329
Total	$51,451	$47,285

6. FINANCING ARRANGEMENTS

Revolving Line of Credit Facilities:

U.S. Line of Credit — The Company maintains an unsecured revolving line of credit with available principal of up to $35,000, expiring in June 2015. The line of credit bears interest at a variable rate of LIBOR plus 1.125% to 1.625% depending on the Company's financial performance (1.3% at December 31, 2012). $14,100 of this credit facility is available to the Company's foreign subsidiaries including those in India, China, Japan and South Korea. Total drawings at December 31, 2012 were $351 with a weighted average interest rate of 1.3%. At December 31, 2012, the remaining availability under the U.S. Line of Credit totaled $34,649.

(In thousands, except share and per share data)

Euro Line of Credit — The Company maintains an unsecured revolving line of credit with a principal amount of Euro 20,000 (approximately $26,400 at December 31, 2012) that expires in June 2014. The credit facility bears interest at various rates based upon the type of loan. Approximately $4,000 of this credit facility is available to the Company's Russian subsidiary and approximately $5,200 is available to the Company's Italian subsidiary. Total drawings at December 31, 2012 were $956 with an interest rate of 1.77%.

Euro Overdraft Facilities — The Company maintains a syndicated overdraft facility with available principal of Euro 850 (approximately $1,100 at December 31, 2012) that does not have an expiration date. This facility bears interest at market rates that vary depending upon the bank within the syndicate that advances the principal outstanding (6.5% at December 31, 2012). At December 31, 2012, the aggregate remaining availability under these lines was approximately $1,100. This facility is collateralized by a common pool of the assets of the Company's German subsidiary, IPG Laser GmbH.

Other European Facilities — The Company maintains two Euro credit lines in Italy with aggregate available principal of Euro 1,000 (approximately $1,300 as of December 31, 2012) which bear interest at 1.3% and expire in June and September 2013. Total drawings at December 31, 2012 were $1,135. At December 31, 2012, the aggregate remaining availability under these lines was $187. These facilities are collateralized by a common pool of the assets of the Company's Italian subsidiary, IPG Photonics (Italy) S.r.l.

Term Debt:

U.S. Long-Term Note — In 2010, the Company extended the maturity of the U.S Long-Term Note from August 2013 to June 2015. Outstanding principal under the U.S. Long-Term Note bears interest at LIBOR plus 0.9% to 1.3%, depending on certain financial ratios and requires monthly principal payments of $111 and interest through June 2015, at which time the remaining principal is payable. This note is collateralized by a mortgage on the real estate and building in Massachusetts, housing its U.S. operations. The Company entered into an interest rate swap instrument which converts the variable LIBOR rate on the original term note to a fixed rate of 5.0%. For the extended term from August 2013 to June 2015, the Company entered into a separate interest rate swap instrument which converts the variable LIBOR rate to a fixed rate of 3.47%. Changes in fair value of the swaps are included in "Accumulated Other Comprehensive income (loss)" on the consolidated balance sheets. The unrealized loss on the swap will be recognized into income over the term of the swap as a charge to interest expense.

The Company's existing borrowings under financing arrangements consist of the following:

	December 31,	
	2012	2011
Revolving Line of Credit Facilities:		
Other European Facilities	$ 1,135	$ 393
Euro Line of Credit	956	2,421
Foreign subsidiary drawings on U.S. Line of Credit	351	4,243
Total	$ 2,442	$ 7,057
Term Debt:		
U.S. Long-Term Note	$14,000	$15,333
Other notes payable	1,519	2,006
Less: current portion	(1,505)	(1,613)
Total long-term debt	$14,014	$15,726

(In thousands, except share and per share data)

The Company is required to meet certain financial covenants associated with its U.S. Line of Credit and U.S. Long-Term Note. These covenants, tested quarterly, include a debt service coverage ratio and a funded debt to earnings before interest, taxes, depreciation and amortization ("EBITDA") ratio. The debt service coverage covenant requires it to maintain a trailing twelve month ratio of cash flow to debt service that is greater than 1.5:1. Debt service is defined as required principal and interest payments during the period. Cash flow is defined as EBITDA less unfunded capital expenditures. The funded debt to EBITDA covenant requires that the sum of all indebtedness for borrowed money on a consolidated basis shall be less than two times the Company's trailing twelve months EBITDA.

7. REDEEMABLE NONCONTROLLING INTERESTS, STOCKHOLDERS' EQUITY AND NONCONTROLLING INTERESTS

Redeemable Noncontrolling Interests — Redeemable noncontrolling interests reported in the accompanying consolidated financial statements related to a 22.5% minority interest of the Company's Russian subsidiary, NTO IRE-Polus ("NTO"), as of December 31, 2011 and through June 29, 2012, respectively.

In December 2010 and June 2011, the Company sold an aggregate 22.5% minority interest (the "Minority Interest") of NTO to the Russian Corporation for Nanotechnologies ("Rusnano") for $45,000. In addition, the Company had a call option commencing in December 2013 to buy back the Minority Interest at a predetermined value and Rusnano had a warrant to purchase an additional 2.5% interest in NTO and a put option commencing in December 2015 to sell its Minority Interest to the Company at a predetermined value. On June 29, 2012, the Company repurchased the Minority Interest for $55,400 in cash. Under the terms of the agreement, the warrant and the put and call options were terminated. Due to the put rights, the Minority Interest repurchase has been reported as a liability other than permanent equity under ASC 480-10-S99-3A. Based upon the Company's valuation of the Minority Interest, the amount paid to repurchase the Minority Interest did not exceed its fair value. Accordingly, pursuant to ASC 480-10-S99-3A, the Company recorded the amount paid in excess of carrying amount in additional paid-in capital.

The following is a reconciliation of the reported amounts of redeemable noncontrolling interest in the accompanying balance sheets as of December 31, 2012:

	2012	2011
Balance at January 1	$ 46,123	$24,903
Initial interest in book value of subsidiary	—	10,177
Increase to the initial redemption value	—	9,795
Net income attributable to redeemable NCI	2,740	3,156
Adjustments to redemption value	(493)	493
Other comprehensive (loss) attributable to redeemable NCI	(841)	(2,401)
Carrrying value of redeemable NCI at purchase date	$ 47,529	—
Purchase of redeemable NCI in excess of carrying amount	7,794	—
Rupurchase of NCI, less warrant value	(55,323)	—
Balance at December 31	$ —	$46,123

Authorized Capital — The Company has authorized capital stock consisting of 175,000,000 shares of common stock, par value $0.0001 per share, and 5,000,000 shares of preferred stock, par value $0.0001 per share. There are no shares of preferred stock outstanding as of December 31, 2012.

Dividend — The Company declared and paid a one-time special cash dividend on its capital stock in December 2012 of $33,353 or $0.65 per share.

Noncontrolling Interests — Noncontrolling interests reported in the accompanying consolidated financial statements consisted of a 10% noncontrolling interest of the Company's South Korean subsidiary, IPG Photonics (Korea) Ltd. ("IPG Korea"), as of December 31, 2011. In January 2012, the Company purchased the outstanding 10% noncontrolling interest of IPG Korea held by the management of IPG Korea from the other stockholder of IPG Korea.

For the years ended December 31, 2012, 2011 and 2010, the net income attributable to NCI of $2,740, $3,250 and $361 includes amounts related to the Rusnano NCI of $2,740, $3,156 and $276, respectively. The net income attributable to NCI classified as permanent equity totaled $94 and $85 in 2011 and 2010, respectively.

Prior to the Rusnano investment, the Company purchased the interests of certain noncontrolling stockholders of NTO. In 2010, the Company purchased a 0.1% interest held by our Chief Executive Officer and certain other Company employees for $92.

8. RELATED-PARTY TRANSACTIONS

In 2012, the Company purchased various parts/services from a company for which one of the Company's outside directors is related to. The payments made for such services totaled $3,973 of which $3,967 were made prior to that outside director being appointed to the Company's board. The Company also sold various products to a separate company with whom another of the Company's outside directors is related to. Sales to that company totaled $194 for 2012.

Until July 2010, the Company subleased office space in the United Kingdom from an entity controlled by its chief executive officer and reimbursed the entity for general and administrative expenses. The costs related to the lease and services totaled $46 for 2010.

In 2011 and 2010, the Company paid $103 and $182, respectively, to the father of its chief financial officer. The amounts included payments for consulting services, commissions and reimbursement of expenses. No payments were made in 2012.

(In thousands, except share and per share data)

9. NET INCOME ATTRIBUTABLE TO IPG PHOTONICS CORPORATION PER SHARE

The following table sets forth the computation of basic and diluted net income attributable to IPG Photonics Corporation per share:

	Year Ended December 31,		
	2012	2011	2010
Net income attributable to IPG Photonics Corporation	$ 145,004	$ 117,759	$ 53,991
Adjustments to redemption value of redeemable noncontrolling interests	493	(493)	—
Net income attributable to common stockholders	145,497	117,266	53,991
Weighted average shares	50,477,054	47,365,451	46,423,543
Dilutive effect of common stock equivalents	1,059,316	1,319,260	1,169,991
Diluted weighted average common shares	51,536,370	48,684,711	47,593,534
Basic net income attributable to IPG Photonics Corporation per share	$ 2.86	$ 2.49	$ 1.16
Adjustments to redemption value of redeemable noncontrolling interests	0.01	(0.01)	—
Basic net income attributable to common stockholders	$ 2.87	$ 2.48	$ 1.16
Diluted net income attributable to IPG Photonics Corporation per share	$ 2.80	$ 2.42	$ 1.13
Adjustments to redemption value of redeemable noncontrolling interests	0.01	(0.01)	—
Diluted net income attributable to common stockholders	$ 2.81	$ 2.41	$ 1.13

The computation of diluted weighted average common shares excludes 164,858, 338,679 and 35,185 shares for the years ended December 31, 2012, 2011 and 2010, respectively, because the effect on net income attributable to IPG Photonics Corporation per share would have been anti-dilutive.

10. COMMITMENTS AND CONTINGENCIES

Operating Leases — The Company leases certain facilities under cancelable and noncancelable operating lease agreements which expire through January 2018. In addition, it leases capital equipment under operating leases. Rent expense for the years ended December 31, 2012, 2011 and 2010, totaled $3,885, $4,369 and $3,516, respectively.

Commitments under the noncancelable lease agreements as of December 31, 2012 are as follows:

Years Ending December 31	Facilities	Equipment	Total
2013	$ 2,636	$ 831	$ 3,467
2014	2,525	494	3,019
2015	2,654	221	2,875
2016	2,254	46	2,300
2017	59	25	84
Thereafter	2	27	29
Total	$10,130	$1,644	$11,774

Employment Agreements — The Company has entered into employment agreements with certain members of senior management. The terms of these agreements are up to two years and include noncompete and nondisclosure provisions, as well as provisions for defined severance for terminations of employment under certain conditions and change of control of the Company.

Contractual Obligations — The Company has entered into various purchase obligations that include agreements for construction of buildings, raw materials and equipment. Obligations under these agreements were $8,921 and $14,377 as of December 31, 2012 and 2011, respectively.

Legal proceedings — From time to time, the Company may be involved in disputes and legal proceedings in the ordinary course of its business. These proceedings may include allegations of infringement of intellectual property, commercial disputes and employment matters. As of December 31, 2012 and through the date of the Company's subsequent review period of February 28th, 2013, the Company has no legal proceedings ongoing that management estimates could have a material effect on the Company's Consolidated Financial Statements.

11. EMPLOYEE BENEFIT PLANS

The Company maintains a 401(k) retirement savings plan covering all of its U.S. employees. The Company makes matching contributions equal to 50% of the employee's contributions, subject to a maximum of 6% of eligible compensation. Compensation expense related to its contribution to the plan for the years ended December 31, 2012, 2011 and 2010, approximated $848, $701 and $607, respectively.

The Company has offered an employee stock purchase plan covering its U.S. and German employees. The plan allows employees who participate to purchase shares of common stock through payroll deductions at a 15% discount to the lower of the stock price on the first day or the last day of the six-month purchase period. Payroll deductions may not exceed 10% of the employee's compensation and are subject to other limitations. Compensation expense related to the employee stock purchase plan approximated $452, $359 and $206 for the years ended December 31, 2012, 2011 and 2010, respectively. As of December 31, 2012, there were 209,534 shares available for issuance under the employee stock purchase plan.

12. BUSINESS COMBINATIONS

On August 31, 2012, the Company acquired the working capital and long-term assets of JP Sercel Associates, Inc., which is a manufacturer of laser-based systems performing fine processing of materials used in semiconductor, LED and solar applications. The acquisition also included contingent consideration which is more fully discussed in the fair value disclosures in Note 1. The assets acquired were primarily intangible and included technology and production know-how and the remainder related to customer relationships, non-compete agreements and trade names which are more fully described in the goodwill and intangible assets disclosures in Note 13. The acquisition did not have a material effect on the Company's financial results in 2012.

The Company completed the acquisition of Multilane Technology through its Italian subsidiary in the first quarter of 2011. The acquisition also included contingent consideration which is more fully discussed in the fair value disclosures in Note 1. Net assets acquired primarily consisted of intangible assets which are more fully described in the goodwill and intangible assets disclosures in Note 13. The acquisition did not have a material effect on the Company's financial results in 2011.

In January 2010, the Company completed the acquisition of the outstanding shares of privately-held, Birmingham, Alabama-based Photonics Innovations, Inc., a maker of active and passive laser materials and tunable lasers for scientific, biomedical and technological applications. In April 2010, the Company completed

(In thousands, except share and per share data)

the acquisition of privately-held, Germany-based Cosytronic KG, a specialist in joining technology with an emphasis on engineering know-how in automated welding turnkey solutions. The acquisition allows the Company to extend its product offerings to include a welding tool that integrates seamlessly with IPG's fiber laser. The total cash paid for these acquisitions in 2010 was $4,508. The acquisitions also included seller provided financing and contingent consideration which is more fully discussed in the fair value disclosures in Note 1. The assets acquired were primarily intangible assets and included patents, production know-how and customer relationships which are more fully described in the goodwill and intangible assets disclosures in Note 13. The acquisitions did not have a material effect on the Company's financial results in 2010.

13. GOODWILL AND INTANGIBLE ASSETS

Goodwill — The following table sets forth the changes in the carrying amount of goodwill:

	Amounts
Balance at January 1, 2012	$ —
Goodwill arising from the acquisition	2,898
Balance at December 31, 2012	$2,898

The goodwill of $2,898 arising from the acquisition largely reflects the potential synergies and expansion of the Company's service offerings complementary to its specialized laser systems and UV and short-pulse fiber lasers. The goodwill arising from the acquisition in 2012 is deductible over 15 years for federal tax purposes.

Intangible Assets — Intangible assets consist of the following:

	December 31, 2012				December 31, 2011			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Lives	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Lives
Patents	$ 4,664	$(4,193)	$ 471	6 Years	$ 4,664	$(3,278)	$1,386	6 Years
Customer relationships	3,993	(2,363)	1,630	5 Years	3,567	(1,619)	1,948	5 Years
Production know-how	2,514	(656)	1,858	9 Years	2,477	(547)	1,930	9 Years
Technology license	4,229	(678)	3,551	8 Years	1,155	(262)	893	4 Years
	$15,400	$(7,890)	$7,510		$11,863	$(5,706)	$6,157	

On August 31, 2012, the Company acquired the working capital and long-term assets of JP Sercel Associates, Inc. ("JPSA") which is a manufacturer of laser-based systems performing fine processing of materials used in semiconductor, LED and solar applications. As a result of the acquisition, the Company recorded $2,898 of goodwill and intangible assets of $3,400, of which $2,400 related to technology and production know-how and the remainder related to customer relationships, non-compete agreements and trade names with weighted-average estimated useful lives of 10 years, 10 years, 5 years and 7 years, respectively. In addition to cash paid, consideration includes contingent consideration based on sales targets that extend for two one-year periods beginning October 1, 2012. Total possible additional payouts under these earn-outs are $18,500.

The Company completed the acquisition of Multilane Technology through its Italian subsidiary in the first quarter of 2011. Consideration included cash payments aggregating $900 and contingent consideration with an aggregate fair value of $282. Net assets acquired primarily consisted of intangible assets related to software aggregating $1,182.

(In thousands, except share and per share data)

The Company completed two acquisitions in 2010, one in the U.S. in the first quarter and one in Germany in the second quarter. Amounts paid include cash payments aggregating $4,508 and contingent consideration and seller provided financing with an aggregate fair value of $969. Net assets acquired primarily consisted of intangible assets (patents, customer relationships, and production know-how with weighted-average estimated useful lives of 10 years, 5 years and 9 years, respectively) aggregating $5,218.

Amortization expense of intangible assets for the years ended December 31, 2012, 2011 and 2010, was $2,091, $2,246 and $1,772, respectively.

The estimated future amortization expense for intangibles as of December 31, 2012 is as follows:

2013	2014	2015	2016	2017	Thereafter	Total
$1,756	$1,554	$1,106	$670	$644	$1,780	$7,510

14. INCOME TAXES

Income before the impact of income taxes for the years ended December 31 consisted of the following:

	2012	2011	2010
U.S.	$ 58,964	$ 42,637	$17,879
Foreign	150,251	131,947	61,373
Total	$209,215	$174,584	$79,252

The Company's benefit from income taxes for the years ended December 31 consisted of the following:

	2012	2011	2010
Current:			
Federal	$(16,675)	$(15,355)	$ (8,859)
State	(309)	(447)	25
Foreign	(38,941)	(38,061)	(16,467)
Total current	$(55,925)	$(53,863)	$(25,301)
Deferred:			
Federal	$ (2,174)	$ 630	$ 395
State	(140)	106	26
Foreign	(3,232)	(448)	(20)
Total deferred	$ (5,546)	$ 288	$ 401
Provision for income taxes	$(61,471)	$(53,575)	$(24,900)

(In thousands, except share and per share data)

A reconciliation of income tax expense at the U.S. federal statutory income tax rate to the recorded tax provision for the years ended December 31, is as follows:

	2012	2011	2010
Tax at statutory rate	$(73,225)	$(61,104)	$(27,738)
Non-U.S. rate differential — net	11,744	9,295	5,867
State income taxes — net	(1,527)	(1,200)	(625)
Effect of changes in enacted tax rates on deferred tax assets and liabilities	(617)	(192)	(186)
Nondeductible stock compensation expense	(1,020)	(448)	(312)
Other nondeductible expenses	(794)	(339)	(603)
Federal and state tax credits	4,623	2,002	1,104
Change in reserves, including interest and penalties	(243)	(1,688)	(1,501)
Settlements, interest and penalties	—	1	(987)
Change in valuation allowance	(314)	—	(106)
Other — net	(98)	98	187
	$(61,471)	$(53,575)	$(24,900)

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities at December 31, are as follows:

	2012	2011	2010
Property, plant and equipment	$(3,629)	$ 901	$ 1,075
Inventory provisions	7,942	7,281	7,294
Allowances and accrued liabilities	(4,829)	(1,494)	(1,830)
Other tax credits	1,673	1,260	1,994
Deferred compensation	3,538	2,669	1,417
Net operating loss carryforwards	5	21	56
Valuation allowance	—	(314)	(314)
Net deferred tax assets	$ 4,700	$10,324	$ 9,692

In general, it is the Company's practice and intention to reinvest the earnings of non-U.S. subsidiaries in those operations. Accordingly, it has not made any provision for additional U.S. or foreign withholding taxes with respect to repatriation of earnings of non-U.S. subsidiaries. At December 31, 2012 and 2011, the cumulative unremitted earnings that are reinvested in non-U.S. subsidiaries are approximately $283,000 and $122,000, respectively.

As of December 31, 2012, 2011 and 2010, the Company has state credit carry-forwards of $1,419, $918 and $2,438, respectively, that are not included in deferred tax assets. The state credit carry forwards begin expiring in 2015.

(In thousands, except share and per share data)

The following is a tabular reconciliation of the total amounts of unrecognized tax benefits:

	2012	2011	2010
Unrecognized tax benefit — January 1	$4,509	$2,951	$ 2,131
Reductions of prior period positions	(317)	(335)	(1,336)
Additions for tax positions in prior period	—	—	—
Additions for tax positions in current period	1,200	1,893	2,156
Unrecognized tax benefit — December 31	$5,392	$4,509	$ 2,951

Changes in tax laws and rates may affect recorded deferred tax assets and liabilities and the Company's effective tax rate in the future. The American Taxpayer Relief Act of 2012 (the "Act") was signed into law on January 2, 2013. Because a change in tax law is accounted for in the period of enactment, certain provisions of the Act benefiting the Company's 2012 U.S. federal taxes, including the research and experimentation credit, cannot be recognized in the Company's 2012 financial results and instead will be reflected in its 2013 financial results. The Company estimates that a benefit of approximately $800 will be accounted for as a discrete item in its tax provision for the first quarter of 2013. In addition, the Company expects that the Act's extension of these provisions through the end of 2013 will favorably affect its estimated annual effective tax rate for 2013 by approximately 0.4 percentage points as compared to 2012.

Estimated penalties and interest related to the underpayment of income taxes are $352, $133 and $4 for the years ended December 31, 2012, 2011 and 2010, respectively, and are included within the provision for income taxes. Total accrued penalties and interest related to the underpayment of income taxes are $487 and $275 at December 31, 2012 and 2011, respectively.

The Company's uncertain tax positions are related to tax years that remain subject to examination by the relevant taxing authorities. If realized, all of the Company's uncertain tax positions would affect its effective tax rate. None of the uncertain tax positions are expected to settle within one year. Open tax years by major jurisdictions are:

- United States 2002 — 2012
- Germany 2009 — 2012
- Russia 2009 — 2012

15. GEOGRAPHIC AND PRODUCT INFORMATION

The Company markets and sells its products throughout the world through both direct sales and distribution channels. The geographic sources of the Company's net sales based on billing addresses of its customers are as follows:

	Year Ended December 31,		
	2012	2011	2010
United States and other North America	$108,316	$ 86,181	$ 61,706
Europe	200,708	179,584	112,456
Asia and Australia	251,803	204,758	124,254
Rest of World	1,701	3,959	840
Total	$562,528	$474,482	$299,256

Sales are derived from products for different applications: fiber lasers, diode lasers and diodes for materials processing, fiber lasers and amplifiers for advanced applications, fiber amplifiers for communications applications, and fiber lasers for medical applications. Net sales for these product lines are as follows:

	Year Ended December 31,		
	2012	2011	2010
Materials Processing	$492,013	$419,443	$252,014
Other applications	70,515	55,039	47,242
Total	$562,528	$474,482	$299,256

No single customer comprised more than 10% of net sales during the years ended December 31, 2012, 2011 or 2010. The Company has historically depended on a few customers for a significant percentage of its annual net sales. The composition of this group can change from year to year. Net sales derived from the Company's five largest customers as a percentage of its annual net sales were 16%, 17% and 19% in 2012, 2011 and 2010, respectively. Sales to the Company's largest customer accounted for 7%, 8% and 7% of its net sales in 2012, 2011 and 2010, respectively.

The geographic locations of the Company's long-lived assets, net, based on physical location of the assets, as of December 31, 2012, 2011 and 2010, are as follows:

	December 31,		
	2012	2011	2010
United States	$ 86,226	$ 67,550	$ 59,072
Germany	47,019	40,983	41,065
Russia	60,151	32,197	16,578
China	6,424	5,550	3,865
Other	15,674	12,721	4,723
	$215,494	$159,001	$125,303

Long lived assets include property, plant and equipment and demonstration equipment.

16. SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

2012	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(In thousands, except per share data)			
Net sales	$123,192	$137,927	$156,379	$145,030
Gross profit	68,684	74,910	85,959	75,174
Net income	30,548	39,849	42,435	34,912
Net income attributable to IPG Photonics Corporation	29,915	37,742	42,435	34,912
Basic earnings per share	0.63	0.74	0.83	0.68
Diluted earnings per share	0.61	0.72	0.81	0.67
Dividends per common share	—	—	—	0.65

IPG PHOTONICS CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)
(In thousands, except share and per share data)

2011	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	(In thousands, except per share data)			
Net sales	$99,958	$121,936	$129,064	$123,524
Gross profit	53,666	66,706	70,459	66,424
Net income	23,378	31,507	34,269	31,855
Net income attributable to IPG Photonics Corporation	23,068	30,736	32,869	31,086
Basic earnings per share	0.49	0.65	0.68	0.65
Diluted earnings per share	0.47	0.63	0.66	0.64
Dividends per common share	—	—	—	—

EXHIBIT

Exhibit Number	Description
3.1	Form of Second Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.2 to Registration Statement No. 333-136521 filed with the Securities and Exchange Commission (the "Commission") on August 11, 2006)
3.3	Form of Amended and Restated By-laws of the Registrant (incorporated by reference to Exhibit 3.4 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)
4.1	Specimen Stock Certificate (incorporated by reference to Exhibit 4.1 to Registration Statement No. 333-136521 filed with the Commission on November 14, 2006)
4.2	Form of Indenture, to be entered into between the Company and the trustee designated therein (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed with the Commission on December 2, 2009)
10.1	2000 Incentive Compensation Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on May 15, 2007)
10.2	Amendment to Section 4.2 of 2000 Incentive Compensation Plan (incorporated by reference to Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed with the Commission on May 13, 2008)
10.3	2006 Stock Incentive Plan, as amended July 28, 2011 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on August 2, 2011)
10.4	Non-Employee Directors Stock Plan, as amended April 2, 2010 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on June 8, 2010)
10.5	IPG Photonics Non-Employee Director Compensation Plan, amended February 23, 2011 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on March 2, 2011)
10.6	Senior Executive Short-Term Incentive Plan (incorporated by reference to Exhibit 10.5 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)
10.7	2008 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.8 to the Registrant's Current Report on Form 8-K filed with the Commission on May 13, 2008)
10.8	Amendment to 2008 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on June 15, 2009)
10.9	Employment Agreement by and between the Registrant and Valentin P. Gapontsev, dated May 9, 2008 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on May 13, 2008)
10.10	First Amendment to Employment Agreement dated September 16, 2010, between the Registrant and Valentin P. Gapontsev (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the Commission on August 5, 2010)
10.11	Second Amendment to Employment Agreement dated September 5, 2012, between the Registrant and Valentin P. Gapontsev (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the Commission on September 6, 2012)
10.12	Service Agreement by and between the Registrant and Eugene Shcherbakov, dated May 9, 2008 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the Commission on May 13, 2008)

Exhibit Number	Description
10.13	Form of Employment Agreement dated May 9, 2008, between the Registrant and each of Timothy P.V. Mammen, Angelo P. Lopresti, George H. BuAbbud, William S. Shiner and Alexander Ovtchinnikov (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed with the Commission on May 13, 2008)
10.14	Form of Amendment to Employment Agreement dated December 21, 2009, between the Registrant and each of Eugene Scherbakov, Timothy P.V. Mammen, Angelo P. Lopresti, George H. BuAbbud, William S. Shiner and Alexander Ovtchinnikov (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on December 21, 2009)
10.15	Form of Second Amendment to Employment Agreement dated September 16, 2010, between the Registrant and each of Eugene Scherbakov, Timothy P.V. Mammen, Angelo P. Lopresti, George H. BuAbbud, William S. Shiner and Alexander Ovtchinnikov dated as of August 5, 2010 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on September 16, 2010)
10.16	Form of Third Amendment to Employment Agreement dated September 16, 2011, between the Registrant and each of Eugene Shcherbakov, Timothy P.V. Mammen, Angelo P. Lopresti, George H. BuAbbud, William S. Shiner and Alexander Ovtchinnikov (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on September 19, 2011)
10.17	Form of Fourth Amendment to Employment Agreement dated September 5, 2012 between the Registrant and each of Eugene Scherbakov, Timothy P.V. Mammen, Angelo P. Lopresti and Alexander Ovtchinnikov (incorporated by reference to Exhibit 10.1 to the Registrant's Current Agreement from Form 8-K filed with the Commission on September 6, 2012)
10.18	Form of Confidentiality, Non-Competition and Confirmatory Assignment Agreement between the Registrant and each of the named executive officers and certain other executive officers. (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed with the Commission on May 13, 2008)
10.19	Form of Indemnification Agreement between the Registrant and each of its Directors and Executive Officers (incorporated by reference to Exhibit 10.13 to Registration Statement No. 333-136521 filed with the Commission on August 11, 2006)
10.20	Form of Stock Option Agreement under the 2000 Incentive Compensation Plan (incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on May 15, 2007)
10.21	Form of Stock Option Agreement under the 2006 Incentive Compensation Plan (incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on May 15, 2007)
10.22	Form of Stock Option Agreement under the Non-Employee Directors Stock Plan (incorporated by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on May 15, 2007)
10.23	Loan Agreement between the Registrant and Bank of America, N.A. dated as of June 4, 2008 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on June 9, 2008)
10.24	Revolving Credit Note by the Registrant dated June 4, 2008 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the Commission on June 9, 2008)
10.25	Term Note by the Registrant dated June 4, 2008 (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed with the Commission on June 9, 2008)
10.26	Second Amendment to Loan Agreement, between the Registrant and Bank of America, N.A., dated as of September 30, 2010 (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on November 9, 2010)

Exhibit Number	Description
10.27	Revolving Credit Note Modification Agreement No. 1, between the Registrant and Bank of America, N.A., dated as of September 30, 2010 (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on November 9, 2010)
10.28	Term Note Modification Agreement No. 1, between the Registrant and Bank of America, N.A., dated as of September 30, 2010 (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on November 9, 2010)
10.29	Credit Facility Agreement between IPG Laser GmbH and Deutsche Bank AG dated June 18, 2012 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the Commission on June 29, 2012)
10.30.	Guarantee of the Registrant to Deutsche Bank AG dated June 26, 2012 (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed with the Commission on June 29, 2012)
10.31	Enclosure 1 to Guarantee to Deutsche Bank AG dated June 26, 2012 (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed with the Commission on June 29, 2012)
10.32	Investment Agreement by and among the Registrant, The Russian Corporation of Nanotechnologies, IPG Laser GmbH and NTO IRE-Polus, dated October 29, 2010 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on November 4, 2010)
10.33	Form of Put and Call Option Agreement between the Registrant and The Russian Corporation of Nanotechnologies (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the Commission on November 4, 2010)
10.34	Purchase Agreement by and among the Registrant, Open Joint Stock Company "Rusnano", IPG Laser GmbH and NTO IRE-Polus, dated June 28, 2012 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Commission on June 29, 2012)
12.1	Statement re Computation of Earnings to Fixed Charges
21.1	List of Subsidiaries
23.1	Consent of Deloitte & Touche LLP
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 1350
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

NOTICE AND PROXY STATEMENT
2013

April 15, 2013

Dear Fellow Stockholder:

You are cordially invited to attend our annual meeting of stockholders on June 4, 2013. We will hold the meeting at 10:00 a.m. Eastern Time at our world headquarters, 50 Old Webster Road, Oxford, Massachusetts.

A notice of the annual meeting, a proxy statement, proxy card and our 2012 annual report to stockholders, which provide detailed information relating to our activities and operating performance, accompany this letter.

At this year's meeting, you will be asked to elect nine directors to our board of directors for a term of one year, and to ratify the appointment of Deloitte & Touche LLP as our independent registered public accounting firm for 2013. Our board of directors recommends that you approve each of these proposals. I urge you to read the proxy statement for further details about the proposals.

Your vote is important to us and our business. Whether or not you plan to attend the annual meeting of stockholders, we encourage you to cast your vote by completing, signing and dating the enclosed proxy card and returning it promptly in the envelope provided. You may also vote your shares using the internet or the telephone by following the instructions provided on the enclosed proxy card.

On behalf of the entire IPG Board of Directors, we look forward to seeing you at the meeting.

Sincerely,

Dr. Valentin P. Gapontsev
Chairman of the Board of Directors and
Chief Executive Officer

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IPG PHOTONICS CORPORATION
50 Old Webster Road
Oxford, Massachusetts 01540

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To the Stockholders:

We invite you to attend our annual meeting of stockholders which is being held as follows:

Date:	Tuesday, June 4, 2013
Time:	10:00 a.m. Eastern Time
Location:	IPG Photonics Corporation 50 Old Webster Road Oxford, Massachusetts 01540

At the meeting, we will ask our stockholders to:

- elect nine directors named in the proxy to serve until our 2014 annual meeting of stockholders; and
- ratify the appointment of Deloitte & Touche LLP as our independent registered public accounting firm for 2013.

You may vote on these matters in person or by proxy. Whether or not you plan to attend the meeting, we ask that you promptly **vote your shares**. Only stockholders of record at the close of business on April 10, 2013 may vote at the meeting.

By order of the Board of Directors
IPG PHOTONICS CORPORATION

Angelo P. Lopresti
Vice President, General Counsel and Secretary

April 15, 2013
Oxford, Massachusetts

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to be held on June 4, 2013:

The Proxy Statement and 2012 Annual Report to Stockholders are available at http://investor.ipgphotonics.com/annual-proxy.cfm

PROXY STATEMENT
ANNUAL MEETING OF STOCKHOLDERS

GENERAL INFORMATION ABOUT THE MEETING

Our Board of Directors is soliciting proxies from our stockholders in connection with our annual meeting of stockholders to be held on Tuesday, June 4, 2013 and any and all adjournments thereof. No business can be conducted at the annual meeting unless a majority of all outstanding shares entitled to vote are either present in person or represented by proxy at the meeting. As far as we know, the only matters to be brought before the annual meeting are those referred to in this proxy statement. If any additional matters are presented at the annual meeting, the persons named as proxies may vote your shares in their discretion.

This proxy statement and our 2012 annual report are first being mailed to stockholders of record on or about April 17, 2013, and are made available on our website at http://investor.ipgphotonics.com/annual-proxy.cfm. Information on our website does not constitute part of this proxy statement.

Unless otherwise noted, the information in this proxy statement covers our 2012 fiscal year (or "fiscal 2012"), which ran from January 1, 2012 through December 31, 2012, and, in some cases, our 2011 fiscal year (or "fiscal 2011"), which ran from January 1, 2011 through December 31, 2011.

Questions and Answers about the Annual Meeting and Voting

When and Where Is the Annual Meeting?

When:	Tuesday, June 4, 2013, at 10:00 a.m. Eastern Time
Where:	IPG Photonics Corporation 50 Old Webster Road Oxford, Massachusetts

Who Is Entitled to Vote at the Meeting?

You are entitled to vote at the meeting if you owned IPG Photonics shares (directly or in "street name," as defined below) as of the close of business on April 10, 2013, the record date for the meeting. On that date, 51,435,290 shares of our common stock were outstanding and entitled to vote and no shares of our preferred stock were outstanding. Each share of our common stock is entitled to one vote with respect to each matter on which it is entitled to vote; there is no cumulative voting with respect to any proposal.

What Do I Need to Do If I Plan to Attend the Meeting in Person?

If you plan to attend the annual meeting in person, you must provide proof of your ownership of our common stock and a form of personal identification, such as a driver's license, for admission to the meeting. If you are a stockholder of record, the top half of your proxy card is your admission ticket and will serve as proof of ownership. If you hold your shares in street name, a recent brokerage statement or a letter from your bank or broker are examples of proof of ownership. If you hold your shares in street name and you also wish to be able to vote at the meeting, you must obtain a proxy, executed in your favor, from your bank or broker.

What Is the Difference Between Holding Shares Directly as a Stockholder of Record and Holding Shares in "Street Name" at a Bank or Broker?

Most of our stockholders hold their shares directly through a broker, bank or other nominee rather than directly in their own name. As summarized below, there are differences between shares held of record and those held in "street name."

Stockholder of Record: If your shares are registered directly in your name with our transfer agent, you are considered the stockholder of record with respect to those shares, and the proxy statement and annual report were sent directly to you. As the stockholder of record, you have the right to vote your shares as described herein.

"Street Name" Stockholder: If your shares are held by a bank or broker as your nominee, you are considered the beneficial owner of shares held in "street name," and the proxy statement and annual report were forwarded to you by your bank or broker who is considered the stockholder of record with respect to those shares. Your bank or broker sent to you, as the beneficial owner, a document describing the procedure for voting your shares. You should follow the instructions provided by your bank or broker to vote your shares. You are also invited to attend the annual meeting. However, if you wish to be able to vote at the meeting, you must obtain a proxy card, executed in your favor, from your bank or broker.

What Matters Am I Being Asked to Vote On at the Meeting and What Vote is Required to Approve Each Matter?

You are being asked to vote on two proposals. Proposal 1 requests the election of directors. Each director will be elected by the vote of the plurality of the votes cast when a quorum is present. A "plurality of the votes cast" means that the nine persons receiving the greatest number of votes cast "for" will be elected. "Votes cast" excludes abstentions and any votes withheld by brokers in the absence of instructions from street-name holders ("broker non-votes"). If you hold your shares in street name, it is critically important that you submit your voting instructions to your bank or broker if you want your shares to count for Proposal 1.

Proposal 2 requests the ratification of the appointment of our independent registered public accounting firm. The affirmative vote of a majority of the shares which are present at the meeting in person or by proxy, and entitled to vote thereon, is required for such ratification. Abstentions have the same effect as voting against Proposal 2.

Who Counts the Votes?

We have engaged Computershare, N.A. as our independent agent to receive and tabulate stockholder votes. Computershare will separately tabulate "for," "against" and "withhold" votes, abstentions and broker non-votes. Computershare will also act as independent election inspector to certify the results, determine the existence of a quorum and the validity of proxies and ballots, and perform any other acts required under the General Corporation Law of Delaware.

How Can I Vote?

Most stockholders have a choice of voting in one of four ways:

- via the Internet;
- using a toll-free telephone number;
- completing a proxy/voting instruction card and mailing it in the postage-paid envelope provided; or
- in person at the meeting.

The telephone and Internet voting facilities for stockholders of record will close at 1:00 a.m. Central Time on June 4, 2013. The Internet and telephone voting procedures are designed to authenticate stockholders by use of a control number and to allow you to confirm that your instructions have been properly recorded.

If you hold your shares in street name, your bank or broker will send you a separate package describing the procedures and options for voting your shares. Please read this information carefully.

What Does it Mean to Give a Proxy?

Your properly completed proxy/voting instruction card will appoint Valentin P. Gapontsev and Angelo P. Lopresti as proxy holders or your representatives to vote your shares in the manner directed therein by you. Dr. Gapontsev is our Chairman of the Board and Chief Executive Officer. Mr. Lopresti is our Senior Vice President, General Counsel and Secretary. Your proxy permits you to direct the proxy holders to vote "for" or "withhold" for the nominees for director (Proposal 1) and "for", "against", or "abstain" from the appointment of our independent registered accounting firm (Proposal 2).

All of your shares entitled to vote and represented by properly completed proxy or voting instruction received prior to the meeting and not revoked will be voted at the meeting in accordance with your instructions.

What Happens If I Sign, Date and Return My Proxy But Do Not Specify How I Want My Shares Voted on One of the Proposals?

Stockholder of Record: Your proxy will be counted as a vote "For" all of the nominees for director and "For" Proposal 2.

"Street Name" Stockholder: Your broker or nominee may vote your shares only on those proposals on which it has discretion to vote. Under New York Stock Exchange rules, your broker or nominee does not have discretion to vote your shares on non-routine matters such as the election of directors (Proposal 1). However, your broker or nominee does have discretion to vote your shares on routine matters such as Proposal 2.

Can I Change My Vote Before the Meeting?

You can change your vote at any time before your proxy is exercised by delivering a properly executed, later-dated proxy (including an Internet or telephone vote), by revoking your proxy by written notice to the Secretary of IPG Photonics, or by voting in person at the meeting. The method by which you vote by a proxy will in no way limit your right to vote at the meeting if you decide to attend in person.

If your shares are held in street name, please refer to the information forwarded by your bank or broker for procedures on changing your voting instructions.

Is the Proxy Statement Available on the Internet?

Yes. We are mailing copies of the proxy statement and our 2012 annual report to all stockholders. Stockholders can also view these documents on the Internet by accessing our website at http://investor.ipgphotonics.com/annual-proxy.cfm.

Who Is Soliciting my Proxy and Who is Paying for the Cost of this Proxy Solicitation?

The Board of Directors of IPG Photonics is soliciting your proxy to vote at the 2013 annual meeting of stockholders. IPG Photonics will bear the expense of preparing, printing and mailing this proxy material, as well as the cost of any required solicitation. Our directors, officers or employees may solicit proxies on our behalf. We have not engaged a proxy solicitation firm to assist us in the solicitation of proxies, but we may if we deem it appropriate. In addition, we will reimburse banks, brokers and other custodians, nominees and fiduciaries for reasonable expenses incurred in forwarding proxy materials to beneficial owners of our stock and obtaining their proxies.

What Is the Quorum Required to Transact Business?

At the close of business on April 10, 2013, there were 51,435,290 shares of our common stock outstanding. Our by-laws require that a majority of our common stock be represented, in person or by proxy, at the meeting in order to constitute the quorum we need to transact business at the meeting. We will count abstentions and broker non-votes in determining whether a quorum exists.

CORPORATE GOVERNANCE

At IPG Photonics, we believe that strong and effective corporate governance procedures and practices are an extremely important part of our corporate culture. We have summarized several of our corporate governance practices below.

Significant Corporate Governance Practices and Policies

Listed below are some of the significant corporate governance practices and policies we have adopted:

- *Independent Director Majority and Presiding Independent Director.* Seven of the ten directors currently on our Board of Directors (the "Board") are non-employees of the Company who meet the independence criteria under applicable SEC rules and NASDAQ guidelines. Only independent directors sit on our three standing Board committees. The Board established the role of a presiding independent director who is elected annually by the independent directors. More information about the role of the independent directors, the presiding independent director and our Board structure can be found below in this section.
- *Executive Sessions.* Our Board meets regularly in executive sessions without the presence of management, including our Chairman. These sessions are led by our presiding independent director, as described further below in this section.
- *Annual Election of Entire Board.* Stockholders elect each director annually. We do not have a classified board.
- *Related Person Transaction Policy.* Our Nominating and Corporate Governance Committee is responsible for approving or ratifying transactions involving our Company and related persons and determining if the transaction is in, or not inconsistent with, the best interests of our Company and our stockholders. More information about our Related Person Transaction Policy and transactions can be found below in this section.
- *Stock Ownership Guidelines.* Our directors and executive officers are required to own a minimum amount of IPG Photonics shares. We believe that stock ownership requirements align the interest of the directors and officers with stockholders. Our directors and executive officers fully complied with our guidelines in 2012.
- *Prohibition on Hedging.* Our Insider Trading Policy expressly prohibits directors and employees from engaging in short sales of our common stock or buying or selling puts, calls or derivative securities in connection with IPG Photonics shares.

Additional information is provided below regarding these and certain other key corporate governance policies, which we believe enable us to manage our business in accordance with high standards of business practices and in the best interest of our stockholders. Many policies may be found at http://investor.ipgphotonics.com/governance.cfm. Note that information on our website does not constitute part of this proxy statement. Hard copies of these documents may be obtained without charge by any stockholder upon request by contacting the Office of the Secretary, IPG Photonics Corporation, 50 Old Webster Road, Oxford, Massachusetts 01540.

Corporate Governance Guidelines

Our Board has adopted Corporate Governance Guidelines that outline, among other matters, the role and functions of the Board, the responsibilities of various Board committees and the mission of the Board. Each of the Board committees has a written charter that sets forth the purposes, goals and responsibilities of the committee as well as qualification for committee membership, procedures for committee membership, appointment and removal, committee structure and operations and committee reporting to the full board.

The Governance Guidelines provide, among other things, that:

- a majority of our Board must be independent;
- the presiding independent director presides over executive sessions of independent directors;
- the Board appoints all members and chairpersons of the Board committees;
- the Audit, Compensation, and Nominating and Corporate Governance Committees consist solely of independent directors;
- the independent directors meet periodically in executive sessions without the presence of the non-independent directors or members of our management;
- directors may not serve on the boards of more than three other public companies;
- evaluations of the Board and committees are to be conducted annually; and
- directors may not serve on the boards of more than three other public companies;
- the Board and key officers should have a meaningful financial stake in the Company.

The Board regularly reviews changing legal and regulatory requirements, evolving best practices and other developments. The Board modifies the Governance Guidelines and its other corporate governance policies and practices from time to time, as appropriate.

Executive Sessions. Our independent directors meet privately, without employee directors or management present, at least four times during the year. These private sessions are generally held in conjunction with the regular quarterly Board meetings. Other private meetings are held as often as deemed necessary by the independent directors. The Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee meet without employee directors or management present from time to time as they deem necessary.

Director Meetings and Policy Regarding Board Attendance. It has been the practice of our Board and its committees to hold at least four in-person regular meetings each year. The Board and its committees also have telephone meetings throughout the year. In accordance with our Governance Guidelines, our directors are expected to prepare for, attend and actively participate in meetings of the Board and its committees. Our directors are expected to spend the time needed at each meeting and to meet as frequently as necessary to properly discharge their responsibilities. We encourage members of our Board to attend annual meetings of stockholders, but we do not have a formal policy requiring them to do so.

Stock Ownership Guidelines. The Board adopted stock ownership guidelines to more closely align the interests of our directors and executive officers with those of our long-term stockholders. Under the guidelines, the following persons are expected to maintain a minimum investment in our common stock as follows: for non-employee directors, the lesser of 3,000 shares or one times their annual cash Board retainer (excluding committee retainers); for the Chief Executive Officer, the lesser of 7,500 shares or one times his annual salary; and for other executive officers, the lesser of 5,000 shares or one times their respective annual salaries. Vested equity compensation, such as vested stock options and restricted stock, counts towards the stock ownership levels. Indirect ownership of shares through a

separate legal entity counts toward fulfillment of the ownership guidelines. These ownership levels are to be achieved no later than four years after the election as a director or as an executive officer, except that prior to such time the director or officer is expected to retain a certain portion of stock issued upon exercise of stock options or issuance of stock under equity compensation plans after payment of the exercise price and taxes until the minimum ownership levels are attained. All directors and all executive officers were in compliance with our stock ownership guidelines as of December 31, 2012.

Board Self-Assessments. The Board conducts annual self-evaluations to determine whether it and its committees are functioning effectively. The Nominating and Corporate Governance Committee oversees the Board and committee self-assessments and the Board receives a report on its self-assessments annually. Each committee reviews and reassesses the adequacy of its charter annually and recommends any proposed changes. Each committee also annually reviews its own performance and reports the results to the Board.

Prohibition on Hedging. Under our Insider Trading Policy, no director or employee may engage in shorting shares of our common stock, or buying or selling puts, calls or derivatives related to our common stock.

Director Orientation and Continuing Education. Upon joining the Board, directors are provided with an initial orientation about our management, including our business operations, strategy and governance. New directors without previous experience as a director of a public company are expected to enroll in a director education program on the principles of corporate governance and director professionalism offered by a nationally-recognized sponsoring organization. We also provide orientation to directors who join a committee, including oversight responsibilities, policies and practices. We provide our directors with resources and ongoing educational opportunities to assist them in remaining abreast of developments in corporate governance and critical issues relating to the operation of public company boards. We pay for director education expenses and their membership in the National Association of Corporate Directors. The Board also conducts periodic visits to Company facilities as part of its regularly scheduled Board meetings.

Nomination of Directors. The Nominating and Corporate Governance Committee considers candidates for director nominees proposed by directors and stockholders. This Committee may retain recruiting professionals and use director databases to assist in identifying and evaluating candidates for director nominees. The Board seeks members from diverse professional backgrounds with a reputation for integrity who do not have professional commitments that might unreasonably interfere with the demands and duties of a board member. Candidates for director are reviewed in the context of the current composition of the Board, the operating requirements of the Company and the long-term interests of the Company's stockholders. The Nominating and Governance Committee seeks diversity in the membership of the Board. It does not have formal objective criteria for determining the degree of diversity needed or present on the Board. Instead, it and the Board seek candidates with a range of experience. Board candidates are considered based upon various criteria, such as age, skills, knowledge, perspective, broad business judgment and leadership, knowledge of relevant industry, technical or regulatory affairs, business creativity and vision, experience and any other factors appropriate in the context of an assessment by the Nominating and Corporate Governance Committee of the needs of the Board at that time. Candidates for director should have certain minimum qualifications, including the ability to read and understand basic financial statements, and must be over 21 years of age and possess the highest personal integrity and ethics. In addition, the Nominating and Corporate Governance Committee considers whether the individual satisfies criteria for independence as may be required by applicable regulations. The Nominating and Corporate Governance Committee retained the search firm Heidrick & Struggles to assist in the search and evaluation of candidates for director which resulted in the appointment to the Board of Mr. Peeler in September 2012.

The Nominating and Corporate Governance Committee has adopted a policy under which it will consider nominations by stockholders. The same identifying and evaluating procedures apply to all

candidates for director nomination, including candidates submitted by stockholders. The Nominating and Corporate Governance Committee evaluates and interviews potential board candidates. All members of the Board may interview the final candidates.

Code of Business Conduct. We have a code of business conduct that applies to all of our directors and employees, including our Chief Executive Officer, Chief Financial Officer and other executive officers. Our code of business conduct includes provisions covering conflicts of interest, business gifts and entertainment, outside activities, compliance with laws and regulations, insider trading practices, antitrust laws, payments to government personnel, bribes or kickbacks, corporate record keeping and accounting records. The code of business conduct is posted on our website at www.ipgphotonics.com.

Procedures for Submitting Complaints Regarding Accounting and Auditing Matters. We have procedures for the treatment of complaints regarding accounting, internal accounting controls, auditing matters, fight against bribery, banking, and financial crime, including procedures for the confidential and anonymous submission by our directors, officers and employees of concerns regarding questionable accounting, internal accounting controls or auditing matters. These procedures are posted on our website at www.ipgphotonics.com.

Director Independence

We follow director independence rules under NASDAQ listing standards and SEC rules. Our Nominating and Corporate Governance Committee has determined that seven of our ten director nominees, Messrs. Blair, Child, Gauthier, Hurley, Kampfe, Krupke and Peeler are "independent" as defined by NASDAQ Rule 4200(a)(15). Our Nominating and Corporate Governance Committee has determined that no such member has a relationship that would interfere with the exercise of independent judgment in carrying out his responsibilities as a director.

Each of the following committees of the Board is composed solely of independent directors:

- the Audit Committee;
- the Compensation Committee; and
- the Nominating and Corporate Governance Committee.

Board Leadership Structure

In accordance with our Governance Guidelines, the Board has appointed a presiding independent director with leadership authority and responsibilities. The presiding independent director sets the agenda for, and leads, executive sessions of the independent directors, providing consolidated feedback, as appropriate, from those meetings to the Chairman and Chief Executive Officer. The presiding independent director provides input on the agenda for board meetings; facilitates discussions outside of scheduled board meetings among the independent directors on key issues as required; and serves as a non-exclusive liaison with the Chairman and Chief Executive Officer in consultation with the other independent directors. The independent directors of our Board elected Mr. Gauthier as presiding independent director, and this position is voted upon annually by our independent directors.

Dr. Gapontsev serves as our Chairman and Chief Executive Officer. He is the founder of the Company and beneficially owns approximately 15.6% of the Company's common stock as of April 1, 2013. His dual role was established twelve years ago when the Board was first established. The independent directors believe that having Dr. Gapontsev serve in both capacities is in the best interest of the Company and its stockholders because it allows Dr. Gapontsev to more effectively execute the Company's strategic initiatives and business plans. The Board also believes that the appointment of a presiding independent director and the regular use of executive sessions of the non-management directors, along with the Company's strong committee system and substantial majority of independent directors, allow it to maintain effective oversight.

Risk Oversight

One of the Board's primary roles in the Company is to provide general oversight of strategy and operations. The Board reviews strategy regularly with management and provides input to management. As part of its oversight of operations, the entire Board reviews and discusses the performance of the Company and the principal risks involved in the operations and management of the Company. The Board allocates risk oversight responsibility among the full Board, the independent directors and the three committees. The Nominating and Corporate Governance Committee periodically reviews risk oversight matters and responsibilities, then makes recommendations to the Board to allocate risk oversight responsibilities.

The Board as a whole reviews risk management practices and a number of significant risks in the course of its reviews of corporate strategy, management reports and other presentations. The independent directors as a group oversee succession planning. The Audit Committee oversees certain financial risks and recommends guidelines to monitor and control such risk exposures. The Compensation Committee reviews the Company's executive compensation programs, their effectiveness at both linking executive pay to performance and aligning the interests of our executives and our stockholders, and oversees an entity-wide compensation risk assessment. The Nominating and Corporate Governance Committee reviews significant related party transactions with directors, executives and managers and may conduct negotiations on behalf of the Company. The Board's risk oversight role does not interfere with the Company's day-to-day management because over two-thirds of the current directors and two-thirds of the director nominees are independent directors and therefore have no conflicts that might discourage critical review of the Company's risks.

RELATED PERSON TRANSACTIONS

The Board adopted a related person transaction policy that requires the Company's executive officers, directors and nominees for director to promptly notify the Corporate Secretary in writing of any transaction in which (i) the amount exceeds $100,000, (ii) the Company is, was or is proposed to be a participant and (iii) such person or such person's immediate family members ("Related Persons") has, had or may have a direct or indirect material interest (a "Related Person Transaction"). Subject to certain exceptions in the policy, Related Person Transactions must be brought to the attention of the Nominating and Corporate Governance Committee for an assessment of whether the transaction or proposed transaction should be permitted to proceed. In deciding whether to approve or ratify the Related Person Transaction, the Nominating and Corporate Governance Committee considers relevant facts and circumstances. If the Nominating and Corporate Governance Committee determines that the Related Person has a direct or indirect material interest in any such transaction, the Committee must review and approve, ratify or disapprove the Related Person Transaction.

Pursuant to our Governance Guidelines, we expect each of our directors to ensure that other existing and future commitments do not conflict with or materially interfere with his or her service as a director. Directors are expected to avoid any action, position or interest that conflicts with our interests or gives the appearance of a conflict. In addition, directors are required to inform the chairman of our Nominating and Corporate Governance Committee prior to joining the Board of another public company to ensure that any potential conflicts, excessive time demands or other issues are carefully considered.

In 2012, the Company purchased from Veeco Instruments Inc. of equipment and services amounting to approximately $3,973,000. Mr. Peeler, appointed to the Board in September 2012, is the Chief Executive Officer and Chairman of the Board of Veeco Instruments Inc. The Nominating and Corporate Governance reviewed and approved the transactions with Veeco Instruments Inc., which were ordinary course of business transactions conducted on an "arm's length" basis with the Company.

As noted page 36 of this Proxy Statement, Dr. Gapontsev is encouraged to use Company provided aircraft for security and other reasons. When using Company provided aircraft for personal travel, Dr. Gapontsev is required to reimburse the Company for all hours, additional fees and incremental costs related to his personal use or others traveling with him under the corporate aircraft policy approved by the Compensation Committee. In accordance with this policy, Dr. Gapontsev reimbursed the Company $268,839 for the full cost of such travel in 2012.

Communication with our Board of Directors

Interested parties wishing to write to the Board or a specified director or a committee of the Board should send correspondence to Office of the Secretary, IPG Photonics Corporation, 50 Old Webster Road, Oxford, Massachusetts 01540. All written communications received in such manner from stockholders of the Company will be forwarded to the members or committee of the Board to whom the communication is directed or, if the communication is not directed to any particular member(s) or committee(s) of the Board, the communication shall be forwarded to all members of the Board.

BOARD OF DIRECTORS

Mr. Michael Kampfe decided to not stand for re-election to our Board of Directors at our 2013 annual meeting. IPG Photonics extends its sincere appreciation to Mr. Kampfe for the valuable contributions he provided to our Company during his service to IPG as a member of our Board of Directors. The Nominating and Corporate Governance Committee requested that Dr. Krupke continue to serve on the Board based upon his ongoing contributions to the Board and his technical knowledge of lasers and the laser industry. Dr. Krupke, who previously informed the Board of his decision to retire from the Board of Directors at the completion of the current term, agreed to stand for reelection at the 2013 annual meeting of stockholders.

The Company's Certificate of Incorporation provides that the size of the Board may be from one to eleven directors. The Board is currently set at ten members. However, the size of the Board will be reduced to nine members effective June 4, 2013, the date of our 2013 annual meeting of stockholders.

Nominees for Director

The following table sets forth certain information as of April 1, 2013 regarding our incumbent directors nominated for re-election. Each of our incumbent directors, other than Mr. Kampfe (who decided to not stand for re-election), has been nominated by the Board for election at our 2013 annual meeting.

Name	Age	Position
Valentin P. Gapontsev, Ph.D.	74	Chief Executive Officer and Chairman of the Board
Eugene Scherbakov, Ph.D.	65	Managing Director of IPG Laser GmbH, Senior Vice President, Europe and Director
Igor Samartsev	50	Chief Technology Officer and Director
Robert A. Blair	66	Director
Michael C. Child	58	Director
Henry E. Gauthier	72	Director
William S. Hurley	68	Director
William F. Krupke, Ph.D.	76	Director
John R. Peeler	58	Director

Valentin P. Gapontsev, Ph.D., founded IPG in 1990 and has been our Chief Executive Officer and Chairman of our Board since our inception. Prior to that time, he served as senior scientist in laser material physics and head of the laboratory at the Soviet Academy of Science's Institute of Radio Engineering and Electronics in Moscow. He has over thirty years of academic research experience in the fields of solid state laser materials, laser spectroscopy and non-radiative energy transfer between rare earth ions and is the author of many scientific publications and several international patents. Dr. Gapontsev holds a Ph.D. in Physics from the Moscow Institute of Physics and Technology. In 2006, he was awarded the Ernst & Young ® Entrepreneur of the Year Award for Industrial Products and Services in New England, and in 2009, he was awarded the Arthur L. Schawlow Award by the Laser Institute of America. In 2011, he received the Russian Federation National Award in Science and Technology, and he was also selected as a Fellow of the Optical Society of America. *He is the founder of the Company and has successfully led the Company and the Board since the Company was formed. His scientific understanding along with his corporate vision and operational knowledge provide strategic guidance to the Company and the Board. For these reasons, he has been nominated to continue serving on the Board.*

Eugene Scherbakov, Ph.D., has served as the Managing Director of IPG Laser GmbH, our German subsidiary, since August 2000 and has been a member of our Board since September 2000. He has served as Senior Vice President-Europe since February 2013. Dr. Scherbakov served as the Technical Director of IPG Laser from 1995 to August 2000. From 1983 to 1995, Dr. Scherbakov was a senior scientist in fiber optics and head of the optical communications laboratory at the General Physics Institute, Russian Academy of Science in Moscow. Dr. Scherbakov graduated from the Moscow Physics and Technology Institute with an M.S. in Physics. In addition, Dr. Scherbakov attended the Russian Academy of Science in Moscow, where he received a Ph.D. in Quantum Electronics from its Lebedev Physics Institute and a Dr.Sci. degree in Laser Physics from its General Physics Institute. Dr. Scherbakov has been nominated to continue serving on the Board because of his position as manager of IPG Laser GmbH and because of his extensive technological knowledge of fiber lasers and components and the manufacturing process. His service as an executive officer of the Company provides the Board with a detailed understanding of the Company's operations.

Igor Samartsev has served as our Chief Technology Officer since 2011 and has been a member of our Board since February 2006. Since 2005, he has also served as the Deputy General Manager of our Russian subsidiary, NTO IRE-Polus. He served as the Technical Director of NTO IRE-Polus from 2000 to April 2005 and, from 1993 to 2001, he was the Deputy Director of NTO IRE-Polus. Mr. Samartsev holds an M.S. in Physics from the Moscow Institute of Physics and Technology. *Mr. Samartsev is one of the founders of the Company and has a significant management role in the Company as Chief Technology Officer and as Deputy General Manager of our Russian subsidiary. The Board values Mr. Samartsev's understanding of technology developments at the Company as well as our Russian operations. For these reasons, he has been nominated to continue serving on the Board.*

Robert A. Blair has served as a member of our Board since September 2000. Since January 1999, Mr. Blair has been the President of the Blair Law Firm P.C. Mr. Blair was a senior partner at the law firm of Manatt, Phelps & Phillips from 1995 to 1999. He was the managing partner of the law firm of Anderson, Hibey, Nauheim & Blair from 1981 to 1995. He was an independent trustee under Winkler Trusts from 1996 to 2012, previously the primary sources of equity for, and owners of, real estate ventures developed by The Mark Winkler Company. Mr. Blair is managing partner of several real estate partnerships, has been a manager/principal in cellular telephone ventures and assisted in the launch of a VoIP business. He is the founding Chairman and Chairman Emeritus of the S Corporation Association of America. Mr. Blair holds a B.A. in Mathematics from the College of William & Mary, where he previously served on its governing Board of Visitors, and a J.D. from the University of Virginia School of Law, where he was a member of the Virginia Law Review. *Mr. Blair has been nominated to continue serving on the Board because of his extensive management and legal experience and his knowledge of international*

business transactions and government practice. Also, Mr. Blair has valuable experience from years of serving on compensation committees and negotiating numerous employment arrangements.

Michael C. Child has served as a member of our Board since September 2000. Since July 1982, Mr. Child has been employed by TA Associates, Inc., a private equity investment firm, where he currently serves as Senior Advisor and prior to January 2011, was Managing Director. Since June 2010, he has served on the board of directors of Finisar Corporation, a developer and manufacturer of optical subsystems and components for networks. He also has served on the board of directors of Ultratech Inc. since April 2012. Ultratech is a developer and manufacturer of advanced packaging lithography systems and laser processing technologies. Mr. Child holds a B.S. in Electrical Engineering from the University of California at Davis and an M.B.A. from the Stanford University Graduate School of Business. Mr. Child has been nominated to continue serving on the Board because of his extensive knowledge of management, operations and finance of technology growth companies. In addition, he has extensive board and committee experience at both public and private companies.

Henry E. Gauthier has served as a member of our Board since April 2006. Mr. Gauthier was President from February 2005 to May 2005, consultant from January 2004 to February 2005 and June 2005 to December 2006, and Chairman of the board of directors from May 2005 to December 2008, of Reliant Technologies, Inc., which was acquired in December 2008 by Solta Medical, Inc., a manufacturer of medical laser systems and one of our customers. He served as Vice Chairman of the board of directors of Coherent, Inc., a manufacturer of photonic products, from October 2002 to March 2006. He served as Chairman of the board of directors of Coherent, Inc. from February 1997 to October 2002 and was its President from 1983 to 1996. Since July 1996, Mr. Gauthier has served as a principal at Gauthier Consulting. He was a member of the board of directors of Alara, Inc. from 1997 to 2010. Mr. Gauthier attended the United States Coast Guard Academy, San Jose State University, and the Executive Institute of the Stanford University Graduate Business School. *Mr. Gauthier has been nominated to continue serving on the Board because of his extensive knowledge of the laser industry and his management and operational experience from over two decades as an executive at the world's largest publicly held laser company. Having been a member of the audit, compensation, and nominating and corporate governance committees of public and private company boards in the technology field, Mr. Gauthier is familiar with a full range of corporate and board functions.*

William S. Hurley has served as a member of our Board since April 2006. Since April 2006, he has been principal of W. S. Hurley Financial Consulting, which provides supplemental chief financial officer services. From 2002 to April 2006, he was a partner with Tatum LLC, a nationwide executive services and consulting firm. He was Senior Vice President and Chief Financial Officer at Applied Science & Technology, a developer, manufacturer and supporter of semiconductor capital equipment, from 1999 until 2001. He served as Vice President and Chief Financial Officer at Cybex International, Inc., a designer, manufacturer and distributor of fitness equipment, from 1996 to 1999. From 1992 to 1995, he was Vice President-Controller and Chief Accounting Officer at BBN Corporation, formerly known as Bolt, Beranek & Newman, Inc., a high technology company. From 1993 to 2004, Mr. Hurley was a member of the board of directors of The L. S. Starrett Company, a manufacturer of precision tooling, where he served on the audit and compensation committees. He holds a B.S. in Accounting from Boston College and an M.B.A. in Finance from Columbia University Graduate School of Business, is a certified public accountant, and possesses a Certificate of Director Education issued by the National Association of Corporate Directors. Mr. Hurley has been nominated to continue serving on the Board because of the extensive experience he gained during his service on the board of directors of The L. S. Starrett Company and his experience as a chief financial officer of two public companies.

William F. Krupke, Ph.D., has served as a member of our Board since February 2001. Since 1999, Dr. Krupke has been president of a laser technology and applications consulting firm (now WFK Lasers, LLC). From 1972 to 1999, Dr. Krupke worked at the Lawrence Livermore National Laboratory,

which provides research and development services to various U.S. government departments, serving for the last twenty of such years as Deputy Associate Director of the Laser Programs Directorate. Dr. Krupke holds a B.S. degree in Physics from Rensselaer Polytechnic Institute and M.A. and Ph.D. degrees in Physics from the University of California at Los Angeles. *Dr. Krupke has been nominated to continue serving on the Board because of his deep technological knowledge of lasers from over four decades of experience in the fields of solid-state lasers and innovative laser materials. This provides the Board with valuable insight regarding the Company's products and current technology, as well as the future technological needs of the Company and the laser industry.*

John R. Peeler has served as a member or our Board since September 2012. He has been Chief Executive Officer and a director of Veeco Instruments Inc. since July 2007. Veeco is a developer and manufacturer of MOCVD, molecular beam epitaxy, ion beam and other advanced thin film processes. Prior thereto, he was Executive Vice President of JDS Uniphase Corp. ("JDSU") and President of the Communications Test & Measurement Group of JDSU, which he joined upon the closing of JDSU's merger with Acterna, Inc. ("Acterna") in August 2005. Before joining JDSU, Mr. Peeler served as President and Chief Executive Officer of Acterna. He has a B.S. and M.S. in Electrical Engineering from the University of Virginia. Mr. Peeler has been nominated to continue serving on the Board because of his extensive experience in managing high-growth technology companies, his executive leadership of a publicly traded company with international operations and a wealth of knowledge about the service needs of customers in demanding markets, including semiconductor capital equipment.

Board and Committee Meetings

The table below shows the number of meetings held by the Board and its committees, actions by written consent, as well as current committee memberships. All incumbent directors attended 75% or more of the aggregate meetings of the Board and committees on which they served during fiscal 2012. We encourage directors to attend the annual meeting of stockholders, but we do not have a formal policy regarding such attendance. Last year, six of the directors in office attended the annual meeting.

	Board of Directors	Audit	Compensation	Nominating and Corporate Governance
Meetings held in 2012	9	6	9	7
Written consents in 2012	4	—	3	1
Valentin P. Gapontsev, Ph.D.	Chair			
Robert A. Blair	Member		Chair	Member
Michael C. Child	Member	Member		Chair
Henry E. Gauthier	Member, and presiding independent director	Member		
William S. Hurley	Member	Chair	Member	
Michael R. Kampfe	Member		Member	
William F. Krupke, Ph.D.	Member		Member(1)	Member
John R. Peeler	Member		Member (2)	
Igor Samartsev	Member			
Eugene Scherbakov, Ph.D.	Member			

(1) Dr. Krupke served as a member of the Compensation Committee until September 2012.
(2) Mr. Peeler began serving as a member of the Compensation Committee in September 2012.

Standing Committees of the Board

Audit Committee. The Audit Committee, among other things:

- appoints, approves the fees of, and assesses the independence of our independent registered public accounting firm;
- oversees the work and performance of our independent registered public accounting firm and internal audit function, which includes the receipt and consideration of certain reports from the independent registered public accounting firm and internal audit function;
- resolves disagreements between management and our independent registered public accounting firm;
- pre-approves auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviews and discusses with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- coordinates the oversight of our internal and external controls over financial reporting, disclosure controls and procedures and code of business conduct;
- establishes, reviews and updates our code of business conduct;
- establishes procedures for the receipt of accounting-related complaints and concerns;
- meets independently with our independent registered public accounting firm, management and internal audit function;
- prepares the Audit Committee report required by SEC rules to be included in our proxy statements; and
- performs any other activities as such committee or the Board determines or is required by the Company's charter or by-laws or applicable law.

The Nominating and Corporate Governance Committee has determined that Mr. Hurley, Chair of the Audit Committee, qualifies as an "audit committee financial expert," as defined under the Securities Exchange Act of 1934, as amended, and the applicable rules of the NASDAQ Global Market.

Compensation Committee. The Compensation Committee, among other things:

- annually reviews and approves base salary, short-term and long-term incentive compensation, perquisites and other benefits for our Chief Executive Officer and other officers;
- reviews and approves corporate goals and objectives relevant to compensation of our Chief Executive Officer and other officers;
- evaluates, along with input of the independent directors, the performance of our Chief Executive Officer in light of our corporate goals and objectives and determines the compensation of our Chief Executive Officer;
- periodically reviews compensation practices, procedures and policies throughout the Company;
- reviews and approves employment and severance agreements for our Chief Executive Officer and other officers;
- appoints and approves the fees of the independent compensation consultant assisting in the evaluation of Chief Executive Officer, senior executives and director compensation, and obtains advice from legal, accounting and other advisors as it deems appropriate;

- reviews and recommends to the Board compensation for non-employee members of the Board;
- administers Company equity-based compensation plans;
- reviews management's risk assessment of the Company's compensation policies and practices for all employees and oversees compensation-related risks as delegated by the Board;
- reviews the compensation discussion and analysis and prepares the Compensation Committee Report required by SEC rules to be included in our proxy statement;
- reviews the activities of the saving plan committee; and
- performs any other activities as such committee or the Board determines or is required by the Company's charter or by-laws or applicable law.

Nominating and Corporate Governance Committee. The Nominating and Corporate Governance Committee, among other things:

- develops and recommends to the Board criteria for board membership;
- recommends to the Board changes that the Committee believes to be desirable with regard to the appropriate size, functions and needs of the Board;
- identifies and evaluates director candidates, including nominees recommended by our stockholders;
- identifies individuals qualified to fill vacancies on any committee of the Board;
- reviews procedures for stockholders to submit recommendations for director candidates;
- recommends to the Board the persons to be nominated for election as directors and to each of the Board's committees;
- reviews the performance of the Committee and evaluates its charter periodically;
- develops and recommends to the Board a set of corporate governance guidelines;
- reviews and recommends risk oversight responsibilities of the Board and committees;
- reviews and approves related party transactions;
- oversees annual self-assessments by the Board and its committees; and
- performs any other activities as such committee or the Board determines or is required by the Company's charter or by-laws or applicable law

Compensation Committee Interlocks and Insider Participation

No member of our Compensation Committee is or has been an officer or employee of our Company or any of our subsidiaries.

DIRECTOR COMPENSATION

The objectives for our non-employee director compensation program are to attract highly-qualified individuals to serve on our Board and align their interests with those of our stockholders. Our non-employee directors are paid pursuant to our non-employee director compensation plan described below. Our Compensation Committee reviews our director compensation program annually to confirm that the program remains appropriate and competitive and recommends any changes to our full Board for consideration and approval.

Director Compensation Plan

Our non-employee director compensation plan provides for both cash and equity compensation for our non-employee directors. Directors who are also our employees receive no additional compensation for their service as directors. The Compensation Committee engaged Radford, a unit of Aon Hewitt ("Radford"), an independent compensation consultant, to provide a comprehensive review of compensation for non-employee directors and to make recommendations with regard to director compensation matters. Based upon a review in January 2012 by Radford, the Compensation Committee recommended no changes to non-employee director compensation in 2012.

Cash Compensation. Our non-employee directors receive the annual retainers from us set forth in the table below. Directors do not receive separate fees for attending Board or committee meetings or meetings of stockholders.

	Amount
Board Retainer	$40,000
Presiding Independent Director Retainer	$20,000
Audit Committee Retainers	
Chair	$22,500
Non-Chair	$10,000
Compensation Committee Retainers	
Chair	$20,000
Non-Chair	$ 7,500
Nominating and Corporate Governance Committee Retainers	
Chair	$12,500
Non-Chair	$ 5,000

Equity Compensation. Under our non-employee director compensation plan, non-employee directors continuing in office after each annual meeting of stockholders receive a grant of stock options to purchase 6,667 shares of common stock and restricted stock units for 1,000 shares of common stock vesting in a single installment on the earlier of the one-year anniversary of the date of grant or the next annual meeting of stockholders. The presiding independent director receives options to purchase an additional 3,334 shares of common stock and restricted stock units for an additional 500 shares of common stock. Upon initial election to the Board, each new non-employee director elected prior to 2013 received a grant of stock options to purchase 25,000 shares of our common stock vesting 25% on the first anniversary of the date of grant and 6.25% on each of the next twelve quarters. The exercise price of each of these stock options is the closing market price of our common stock on the date of grant. The non-employee director compensation plan provides that, with respect to options and restricted stock units granted after the adoption of the plan, any director who retires after at least eight years of service on the Board will be entitled to full vesting of all options and restricted stock units then held by such director.

In February 2013, the Board approved changes to the non-employee directors compensation plan to better align it with the Company's other equity compensation programs. There were no changes to the cash retainers for 2013. Vesting for equity grants upon initial election remained over a period of four years but vesting was changed to 25% on each of the first four anniversaries of the date of grant. Also in 2013, the allocation of options and restricted stock units for non-employee directors was made consistent with the allocation for our employees. For grants starting in 2013, non-employee directors will receive an annual grant of stock options to purchase 6,500 shares of common stock and restricted stock units for 1,100 shares of common stock, with the presiding independent director receiving options to purchase an additional 3,250 shares of common stock and restricted stock units for an additional

550 shares of common stock. Each new non-employee director elected in 2013 and thereafter will receive a grant of stock options to purchase 18,750 shares of our common stock and restricted stock units for 3,125 shares of common stock.

Director Compensation Table

The following table summarizes the compensation of each of our non-employee directors for the fiscal year ended December 31, 2012:

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)(1)	Option Awards ($)(1)	Total ($)
Robert A. Blair	67,500	42,430	123,026	232,956
Michael C. Child	65,000	42,430	123,026	230,456
Henry E. Gauthier	70,000	63,645	184,568	318,213
William S. Hurley	70,000	42,430	123,026	235,456
Michael R. Kampfe	47,500	42,430	123,026	212,956
William F. Krupke, Ph.D.	52,500	42,430	123,026	217,956
John R. Peeler (2)	15,450	—	624,500	639,950

(1) Valuation based on the fair value of the restricted stock unit and stock option awards as of the grant date determined pursuant to Financial Accounting Standards Board Accounting Standards Codification Topic 718 ("ASC Topic 718"), with respect to 2012. The assumptions that we used with respect to the valuation of restricted stock unit and stock option awards are set forth in Note 2 to our Consolidated Financial Statements in our Annual Report on Form 10-K filed with the SEC on February 28, 2013. On June 5, 2012, each director then serving on the Board was granted restricted stock units for 1,000 shares of common stock and options to purchase 6,667 shares of common stock at an exercise price of $42.43 per share. Mr. Gauthier, the presiding independent director, was granted on June 5, 2012 additional restricted stock units for 500 shares of common stock and additional options to purchase 3,334 shares of common stock at an exercise price of $42.43 per share. Both restricted stock units and options vest in a single installment on the earlier of the one-year anniversary of the date of grant or the next annual meeting of stockholders. Mr. Peeler was appointed to the Board for the first time in September 2012 and was granted options to purchase 25,000 shares of common stock at an exercise price of $54.98 per share. These stock options vest 25% on the first anniversary of the date of grant and 6.25% in equal installments on each of the next twelve quarters.

(2) John R. Peeler was appointed to the Board and became a member of the Compensation Committee in September 2012 and received pro-rated cash fees after his appointment.

Outstanding Equity Awards Table

The following table provides information regarding unexercised stock options and unvested restricted stock units held by each of our non-employee directors on December 31, 2012:

Name	Unvested Restricted Stock Units (#)	Total Option Awards Held (#)	Exercisable Option Awards (#)
Robert A. Blair	1,000	20,001	13,334
Michael C. Child	1,000	36,668	30,001
Henry E. Gauthier	1,500	35,002	25,001
William S. Hurley	1,000	40,002	33,335
Michael R. Kampfe	1,000	31,667	9,375
William F. Krupke, Ph.D.	1,000	13,334	6,667
John R. Peeler (1)	0	25,000	0

(1) John R. Peeler was appointed to the Board and became a member of the Compensation Committee in September 2012.

We also reimburse directors for all reasonable out-of-pocket expenses incurred for attending Board and committee meetings and director education programs. Non-employee directors do not receive any additional payments or perquisites.

Our certificate of incorporation limits the dollar amount of personal liability of our directors for breaches by them of their fiduciary duties. Our certificate of incorporation requires us to indemnify our directors to the fullest extent permitted by the Delaware General Corporation Law. We have also entered into indemnification agreements with all of our directors and we have purchased directors' and officers' liability insurance.

COMMON STOCK OWNERSHIP

The following table provides information about the beneficial ownership of our common stock as of April 1, 2013 by:

- each person or entity known by us to own beneficially more than five percent of our common stock;
- each of the Named Executive Officers;
- each person who is a director or nominee; and
- all of our executive officers and directors as a group.

In accordance with SEC rules, beneficial ownership includes any shares for which a person or entity has sole or shared voting power or investment power and any shares for which the person or entity has the right to acquire beneficial ownership within 60 days after April 1, 2013 through the exercise of any option, warrant or otherwise. Percentage of beneficial ownership is based on 51,432,300 shares of common stock outstanding as of April 1, 2013. The contact address of all persons and entities in the table below (other than Artisan Partners Holdings L.P. and Columbia Wanger Asset Management, LLC) is in care of IPG Photonics Corporation, 50 Old Webster Road, Oxford, Massachusetts 01540.

Name	Shares Owned	Right to Acquire Shares within 60 Days	Total	Percent
The Valentin Gapontsev Trust I (1)	15,284,002	—	15,284,002	29.7%
Valentin P. Gapontsev, Ph.D. (2)	7,969,993	—	7,969,993	15.5%
IP Fibre Devices (UK) Ltd.	7,354,002	—	7,354,002	14.3%
Artisan Partners L.P. (3)	4,407,350	—	4,407,350	8.6%
Columbia Wanger Asset Management, LLC (4)	4,177,250	—	4,177,250	8.1%
Robert A. Blair	33,538	13,334	46,872	*%
Michael C. Child	7,912	30,001	37,913	*%
Henry E. Gauthier	11,500	25,001	35,001	*%
William S. Hurley	11,000	33,335	48,335	*%
Michael R. Kampfe	—	10,938	10,938	*%
William F. Krupke, Ph.D.	10,700	6,667	17,367	*%
John R. Peeler	—	—	—	*%
Igor Samartsev (5)(6)	920,040	28,880	948,920	1.8%
Eugene Scherbakov, Ph.D. (5)(7)	17,264,002	20,854	17,284,856	33.6%
Angelo P. Lopresti (7)	17,301,691	46,875	17,348,566	33.7%
Timothy P.V. Mammen	20,999	68,828	89,827	*%
Alexander Ovtchinnikov, Ph.D. (7)	17,364,558	8,937	17,373,495	33.8%
Trevor D. Ness	—	12,890	12,890	*%
Nikolai Platonov, Ph.D. (5)(7)	16,264,002	3,000	16,267,002	31.6%
Felix Stukalin	—	11,625	11,625	*%
All executive officers and directors as a group (16 persons)	19,034,867	321,165	19,356,032	37.4%

* Less than 1.0%

(1) Includes 7,354,002 shares beneficially owned by IP Fibre Devices (UK) Ltd. ("IPFD"), in which the Valentin Gapontsev Trust I, a trust formed by Dr. Gapontsev (the "Gapontsev Trust I"), has a 48% economic interest. The trustees of the Gapontsev Trust I are Drs. Ovtchinnikov, Platonov and Scherbakov and Mr. Lopresti. Each of the individual trustees disclaims beneficial ownership of the shares held by the Gapontsev Trust I. See note 7 below.

(2) Includes 7,354,002 shares beneficially owned by IPFD, of which Dr. Gapontsev is the sole managing director. Dr. Gapontsev has sole voting and investment power with respect to the shares held of record by IPFD. Dr. Gapontsev has a 3% economic interest in IPFD.

(3) The address of Artisan Partners Holdings L.P. is 875 East Wisconsin Avenue, Suite 800, Milwaukee, WI 53202. Based solely on a Schedule 13G filed with the Securities and Exchange Commission on February 6, 2013.

(4) The address of Columbia Wanger Asset Management, LLC is 227 West Monroe Street, Suite 3000, Chicago, IL 60606. Based solely on a Schedule 13G/A filed with the Securities and Exchange Commission on February 14, 2013.

(5) Does not include shares held by IPFD. Each such person has an 8% economic interest in IPFD but does not possess voting or investment power with respect to such interest. Each disclaims beneficial ownership of the shares held by IPFD except to the extent of his economic interest therein.

(6) Includes 550,000 shares held by a trust of which Mr. Samartsev's wife is the sole trustee. Mr. Samartsev disclaims beneficial ownership of the shares held in such trust.

(7) Includes (a) 15,284,002 shares beneficially owned by the Gapontsev Trust I, (b) 980,000 shares beneficially owned by the Valentin Gapontsev Trust II, a trust formed by Dr. Gapontsev (the "Gapontsev Trust II"), and (c) 1,000,000 shares beneficially owned by the Valentin Gapontsev Trust III, a trust

formed by Dr. Gapontsev (the "Gapontsev Trust III"), of each of which Drs. Ovtchinnikov and Scherbakov and Mr. Lopresti is a trustee. Dr. Platonov is a trustee of the Gapontsev Trust I and the Gapontsev Trust II. The 15,284,002 shares beneficially owned by the Valentin Gapontsev Trust I include 7,354,002 shares beneficially owned by IPFD. See note 1 above. Each of the individual trustees disclaims beneficial ownership of the shares held by the Gapontsev Trust I, the Gapontsev Trust II and the Gapontsev Trust III.

AUDIT COMMITTEE REPORT

The primary role of the Audit Committee is to assist the Board of Directors in fulfilling its oversight responsibilities by reviewing the financial information proposed to be provided to stockholders and others, the adequacy of the system of internal control over financial reporting and disclosure controls and procedures established by management and the Board, and the audit process and the independent registered public accounting firm's qualifications, independence and performance.

Management has primary responsibility for the financial statements and is responsible for establishing and maintaining the Company's system of internal controls and for preparation of the Company's financial statements. The Company's independent registered public accounting firm, Deloitte & Touche LLP, is responsible for performing an integrated audit of the Company's consolidated financial statements and the effectiveness of internal controls over financial reporting in accordance with standards of the Public Company Accounting Oversight Board (United States) (PCAOB) and issuing an opinion on the financial statements and the effectiveness of internal controls over financial reporting. The Audit Committee has met and held discussions with management, the internal auditors and the Company's independent registered public accounting firm, and has also met separately with the internal auditors and the Company's independent registered public accounting firm, without management present, to review the adequacy of the Company's internal controls, financial reporting practices and audit process.

The Audit Committee has reviewed and discussed the Company's audited consolidated financial statements for the year ended December 31, 2012 with management and the independent registered public accounting firm. As part of this review, the Audit Committee discussed with Deloitte & Touche LLP the required communications described in PCAOB AU Section 380, *Communication with Audit Committees,* and those matters required to be reviewed pursuant to Rule 2-07 of Regulation S-X as well as the results of their audit of the effectiveness of internal controls over financial reporting.

The Audit Committee has received from Deloitte & Touche LLP a written statement describing all relationships between that firm and the Company that might bear on their independence, consistent with PCAOB Ethics and Independence Rule 3526, *Communications with Audit Committees Concerning Independence.* The Audit Committee has discussed the written statement with the independent registered public accounting firm and has considered whether its provision of any other non-audit services to the Company is compatible with maintaining the auditors' independence.

Based on the above-mentioned reviews and discussions, the Audit Committee recommended to the Board of Directors that the Company's audited consolidated financial statements be included in its Annual Report on Form 10-K for the year ended December 31, 2012, as filed with the SEC.

AUDIT COMMITTEE

William S. Hurley, *Chair*
Michael C. Child
Henry E. Gauthier

February 27, 2013

PROPOSAL 1: ELECTION OF DIRECTORS

The stockholders are being asked to elect Dr. Gapontsev, Dr. Scherbakov, Mr. Samartsev, Mr. Blair, Mr. Child, Mr. Gauthier, Mr. Hurley, Dr. Krupke and Mr. Peeler to terms ending with the annual meeting to be held in 2014, until a successor is elected and qualified or until his or her earlier death, resignation or removal. The Board nominated each of these individuals for election at the 2013 annual meeting of stockholders upon the recommendation of the Nominating and Corporate Governance Committee. Each nominee is currently a director of our company. For more information regarding the nominees for director, see *"Board of Directors."*

The Board does not contemplate that any of the nominees will be unable to stand for election, but should any nominee become unable to serve or for good cause will not serve, all proxies (except proxies marked to the contrary) will be voted for the election of a substitute nominee nominated by the Board.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" ALL OF THE NOMINEES FOR DIRECTOR

PROPOSAL 2: RATIFICATION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Deloitte & Touche LLP currently serves as our independent registered public accounting firm and audited our consolidated financial statements for the year ended December 31, 2012. Our Audit Committee has appointed Deloitte & Touche LLP to serve as our independent registered public accounting firm for 2013, and to conduct an integrated audit of our consolidated financial statements for the year ending December 31, 2013 and of our internal control over financial reporting as of December 31, 2013.

Our Audit Committee is responsible for selecting and appointing our independent registered public accounting firm, and this appointment is not required to be ratified by our stockholders. However, our Audit Committee has recommended that the Board submit this matter to the stockholders as a matter of good corporate practice. If the stockholders fail to ratify the appointment, the Audit Committee will reconsider whether to retain Deloitte & Touche LLP, and may retain that firm or another without re-submitting the matter to our stockholders. Even if the appointment is ratified, the Audit Committee may, in its discretion, direct the appointment of a different independent registered public accounting firm at any time during the year if it determines that such a change would be in the best interests of the Company and our stockholders.

We expect that representatives of Deloitte & Touche LLP will attend the meeting, will have an opportunity to make a statement if they desire to do so, and will be available to respond to appropriate questions.

Fees Paid to Deloitte & Touche. The fees for services provided by Deloitte & Touche LLP, member firm of Deloitte Touche Tohmatsu, and their respective affiliates (collectively, "Deloitte & Touche"), to the Company in the last three fiscal years were as follows :

	Fees		
Fee Category	**2012**	**2011**	**2010**
Audit fees	$1,086,580	$1,016,013	$903,050
Audit-related fees	$ 146,200	24,000	—
Tax fees	$ 7,500	—	—
Total Fees	$1,240,280	$1,040,013	$903,050

Audit fees. These fees comprise fees for professional services rendered in connection with the audit of the Company's consolidated financial statements that are customary under auditing standards generally accepted in the United States. Audit fees also include fees for consents and reviews related to SEC filings and quarterly services with respect to the preparation of our unaudited quarterly financial statements.

Audit-related fees. These fees comprise fees for services that are reasonably related to the performance of the audit or review of the Company's financial statements. The audit-related fees in 2012 were principally for services related to our follow-on offering of stock, audit work related to acquisitions and additional SEC work.

Tax fees. Fees for tax services would consist of fees for tax compliance services and tax planning and advice services. Tax compliance services are services rendered based upon facts already in existence or transactions that have already occurred to document, compute and obtain government approval for amounts to be included in tax filings and consisted of (i) federal, state and local income tax return assistance, (ii) sales and use, property and other tax return assistance and (iii) assistance with

tax audits and appeals. Tax planning and advice are services rendered with respect to proposed transactions or that alter a transaction to obtain a particular tax result. Such services consisted of tax advice related to (i) certain internal legal restructuring actions and other intra-group restructuring actions, (ii) transfer pricing and (iii) other miscellaneous consultations.

Policy on Pre-Approval of Audit and Permissible Non-Audit Services. The Audit Committee pre-approves all audit and permissible non-audit services provided by the independent registered public accounting firm. These services may include audit services, audit-related services and tax services as well as specifically designated non-audit services that, in the opinion of the Audit Committee, will not impair the independence of the independent registered public accounting firm. Pre-approval is generally provided for each fiscal year, and any pre-approval is detailed as to the particular service or category of services and is generally subject to a specific budget. The independent registered public accounting firm and our management are required to periodically report to the Audit Committee regarding the extent of services provided by the independent registered public accounting firm in accordance with the pre-approval, including the fees for the services performed to date. In addition, the Audit Committee also may pre-approve particular services on a case-by-case basis, as required.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE RATIFICATION OF DELOITTE & TOUCHE LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR 2013

EXECUTIVE OFFICERS

The following table sets forth certain information regarding our executive officers as of April 10, 2013.

Name	Age	Position
Valentin P. Gapontsev, Ph.D.	74	Chief Executive Officer and Chairman of the Board
Eugene Scherbakov, Ph.D.	65	Managing Director of IPG Laser GmbH, Senior Vice President, Europe and Director
Timothy P.V. Mammen	43	Chief Financial Officer and Senior Vice President
Angelo P. Lopresti	49	General Counsel, Secretary and Senior Vice President
Alexander Ovtchinnikov, Ph.D.	52	Senior Vice President, Components
Trevor D. Ness	40	Senior Vice President, World Wide Sales
Igor Samartsev	50	Chief Technology Officer and Director
Felix Stukalin	51	Senior Vice President, U.S. Operations

The biographies of Dr. Gapontsev, Dr. Scherbakov and Mr. Samartsev are presented on pages 10 and 11. The biographies of our other executive officers are presented below.

Timothy P.V. Mammen has served as our Chief Financial Officer since July 2000 and a Vice President since November 2000. He was promoted to Senior Vice President in February 2013. Between May 1999 and July 2000, Mr. Mammen served as the Group Finance Director and General Manager of the United Kingdom operations for IPFD. Mr. Mammen was Finance Director and General Manager of United Partners Plc, a commodities trading firm, from 1995 to 1999 and prior to that he worked in the finance department of E.I. du Pont de Nemours and Company. Mr. Mammen holds an

Upper Second B.Sc. Honours degree in International Trade and Development from the London School of Economics and Political Science. Also, he is a Chartered Accountant and a member of the Institute of Chartered Accountants of Scotland.

Angelo P. Lopresti has served as our General Counsel and Secretary and one of our Vice Presidents since February 2001. He was promoted to Senior Vice President in February 2013. Prior to joining us, Mr. Lopresti was a partner at the law firm of Winston & Strawn LLP from 1999 to 2001. Prior to that, he was a partner at the law firm of Hertzog, Calamari & Gleason from 1998 to 1999 and an associate there from 1991 to 1998. Mr. Lopresti holds a B.A. in Economics from Trinity College and a J.D. from the New York University School of Law.

Alexander Ovtchinnikov, Ph.D., has served as our Vice President, Components, since September 2005 and as Director of Material Sciences from October 2001 to September 2005. He was promoted to Senior Vice President in February 2013. Prior to joining us, Dr. Ovtchinnikov was Material Science Manager of Lasertel, Inc., a maker of high-power semiconductor lasers, from 1999 to 2001. For 15 years prior to joining Lasertel, Inc., he worked on the development and commercialization of high power diode pump technology at the Ioffe Institute, Tampere University of Technology, Coherent, Inc. and Spectra-Physics Corporation. He holds an M.S. in Electrical Engineering from the Electrotechnical University of St. Petersburg, Russia, and a Ph.D. from Ioffe Institute of the Russian Academy of Sciences.

Trevor D. Ness has served as our Senior Vice President, World Wide Sales since February 2013. From January 2011 until February 2013, he served as our Vice President –Asian Operations. Prior to joining us, he was Director of GSI Precision Technologies China from May 2005 to December 2010. Mr. Ness holds a B.S. in Geology from Imperial College, a H.N.C. from Bournemouth University and an M.B.A. from The Open University.

Felix Stukalin has served as our Senior Vice President, U.S. Operations since February 2013. From March 2009 until February 2013, he served as our Vice President, Devices. Prior to joining us, he was Vice President, Business Development of GSI Group Inc. from April 2002 to September 2008, and from March 2000 to April 2002 he was Vice President of Components and President of the Wave Precision divisions of GSI Lumonics, Mr. Stukalin holds a B.S. in Mechanical Engineering from the University of Rochester and he is a graduate of the Harvard Business School General Management Program.

COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis provides a comprehensive review of our executive compensation philosophy and program, including our program design for fiscal year 2012. The discussion in this section focuses on the compensation of our "Named Executive Officers" or "NEOs" for fiscal year 2012, who were:

- Valentin P. Gapontsev, Ph.D., our Chairman and Chief Executive Officer;
- Timothy P.V. Mammen, our Senior Vice President and Chief Financial Officer;
- Eugene Scherbakov, Ph.D., the Managing Director of IPG Laser GmbH, our subsidiary, and Senior Vice President, Europe;
- Angelo P. Lopresti, our Senior Vice President, General Counsel and Secretary; and
- Alexander Ovtchinnikov, Ph.D., our Senior Vice President, Components.

Compensation Program Objectives and Principles

We believe that our success depends on the continued contributions of our executive officers. Our executive compensation programs are designed with the philosophy of attracting, motivating and retaining experienced and qualified executive officers and recognizing individual merit and overall business results.

The objectives of our compensation programs are to:

- attract and retain talented and experienced executives;
- motivate and reward executives whose knowledge, skills and performance are critical to achieving strategic business objectives;
- align the interests of our executive officers and stockholders by motivating executive officers to increase long-term stockholder value;
- provide incentives for future performance through both short-term and long-term financial incentives to build a sustainable company and foster the creation of stockholder value; and
- foster a shared commitment among executives through establishment of uniform company goals.

Our compensation philosophy is reflected in the following executive compensation design principles:

- In addition to a competitive base salary, a substantial portion of the executives' potential cash compensation should be tied to a short-term incentive plan that rewards corporate and individual achievement of challenging performance goals; and
- The Company uses a combination of restricted stock units and stock options with a service-based vesting to provide a combination of retention and motivation to increase the value of the Company's stock.

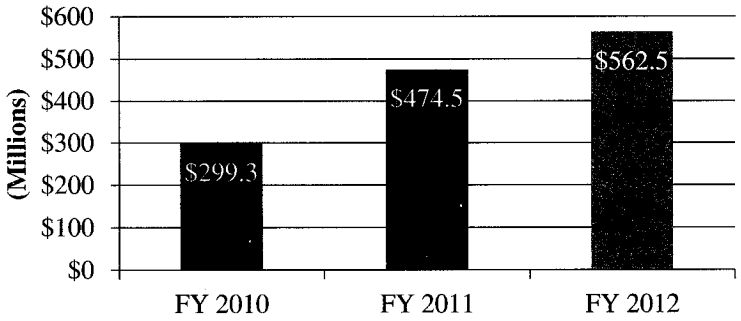
Compensation Element	Objective
Base salary	Provide a competitive fixed component of cash compensation.
Short-term incentive plan	Offer a variable cash compensation opportunity earned based upon the level of achievement of challenging corporate goals, with additional compensation opportunity based upon individual performance.
Long-term incentives	Align long-term management and stockholder interests and strengthen retention with four-year vesting provisions. Service-based equity awards offer certainty and long-term retention while providing additional compensation opportunity to executives based upon increased stock price levels.
Benefit plans	Provide competitive employee benefits. We do not view this as a significant component of our executive compensation program.

2012 Business Highlights

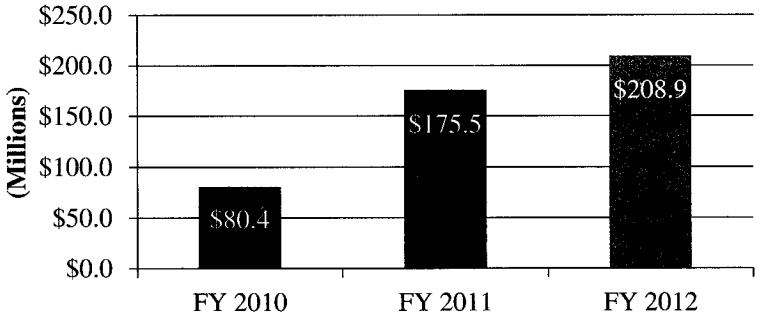
2012 was another record year for IPG, marked by continued growth and investment.

Our strong performance is largely attributable to factors specific to the Company, such as our market leadership in fiber lasers, adding original equipment manufacturers in cutting and welding for high power materials processing applications and introducing new products and applications, assisted by our ongoing significant investments in new products, fixed assets, people and technology to support our growth over the short and long-terms. While we did not grow at the same rate as in 2011, our sales grew at a 19% rate over 2011.

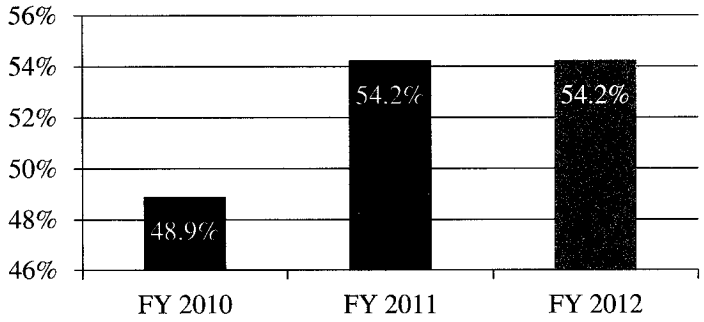
The Company recorded $563 million in revenues in 2012, which is the highest level of revenues for any fiscal year in our history, representing a year-over-year growth rate of 19%.



Our operating income also achieved its highest levels to date, reaching $209 million in 2012 compared to $176 million in 2011, likewise growing at 19%.



The gross margin percentage remained at 54.2%, representing industry-leading gross margins as compared to our laser peers.



The Company increased its cash and cash equivalents to over $384 million at December 31, 2012, reflecting a successful follow-on offering of our common stock in March 2012 and solid operating cash flows. Also, we continued substantial investment during 2012 in property, plant, equipment, technology and people so that we are well-positioned for future demand growth for our industry-leading products. The Company sustained its market leadership in its core fiber laser business, continued to extend its penetration into large-scale laser applications, namely cutting and welding, and targeted fine processing and selected laser systems as new growth drivers.

For more information about our business, please read "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K filed with the Securities and Exchange Commission (the "SEC") on February 28, 2013.

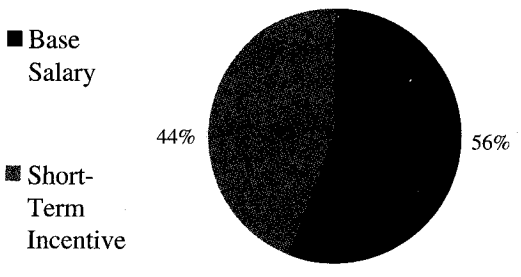
Pay-for-Performance

We structure our executive compensation program so that a meaningful percentage of compensation is tied to the achievement of high levels of Company performance. The payouts under our 2012 compensation program reflect the Company's strong financial and strategic performance. We use net sales and earnings before interest, as adjusted for certain items ("adjusted EBIT"), as the key performance metrics in our compensation program as we believe that they reflect a number of important competitive and business elements, such as product acceptance and profitability, and are therefore excellent barometers of our overall performance. For 2012, our net sales and adjusted EBIT were $563 million and $218 million, respectively, both of which were considerably higher than the levels from 2011, but below the target levels of $588 million and $239 million, respectively, that the Compensation Committee set for the year. These targets were set such that achievement of the targets would have required record-setting performance by the Company.

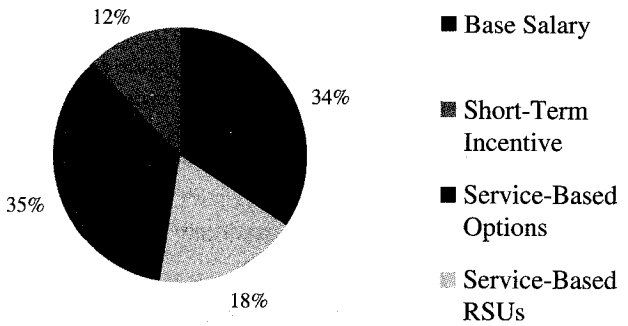
Our 2012 annual short-term incentive plan was structured to pay out 100% of our CEO's base salary and 67% of the other executives' base salaries if (i) the Company successfully achieved both target levels of financial performance and (ii) the executives achieved the highest levels of individual performance. Based on the Company's 2012 net sales, adjusted EBIT and individual performance levels (as further described under "*Components of Compensation in 2012 – Short-Term Incentive Plan*" below), our 2012 short-term incentive plan paid bonuses equal to approximately 78% of our Chief Executive Officer's base salary and 52% of the other Named Executive Officers' base salaries.

To illustrate our pay-for-performance philosophy, the following charts reflect the portions of our executive officers' actual compensation for 2012 represented by each of the major elements of our compensation program – base salary paid, 2012 short-term cash incentives (at actual amount earned), option awards and restricted stock units with service-based vesting criteria (valued at their grant-date fair value):

CEO Pay Mix - 2012

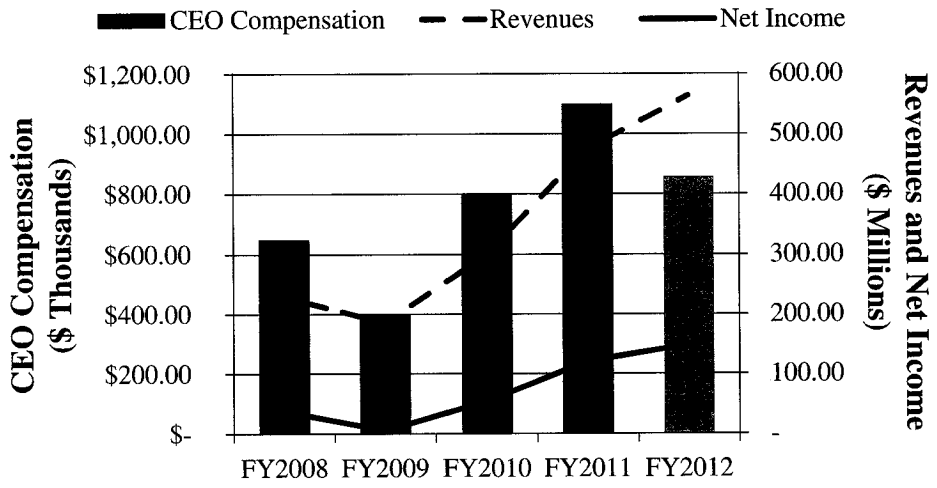


All Other NEOs Pay Mix - 2012



A significant majority of the executives' overall compensation is derived from performance-based or long-term service-based components of our program. In 2012, this included 44% of the Chief Executive Officer's compensation and 66% of the other Named Executive Officers' compensation.

Our Chief Executive Officer does not receive grants of equity because of his significant level of ownership of our common stock. He is a founder of our Company. His compensation is substantially below the compensation of chief executive officers at our peer companies. Also, our Chief Executive Officer's compensation over the past five fiscal years further reflects the effectiveness of our pay-for-performance structure. The Company's operating results over the past five years have resulted in corresponding levels of Chief Executive Officer compensation. Conversely, in fiscal year 2009, when the global economic downturn significantly impaired our financial results, Dr. Gapontsev received only his base salary for that year, as no bonus was earned based on the Company's results, notwithstanding management's effectiveness during that challenging period in maintaining the employee and customer bases so that we were well-positioned to take advantage of the subsequent demand recovery. The following table demonstrates our pay-for-performance model by tracking Dr. Gapontsev's actual compensation in each of the last five fiscal years against Company revenues and net income:



Corporate Governance Highlights Relating to Compensation

We endeavor to maintain high governance standards with respect to the oversight of our executive compensation policies and practices. Under the direction of the Compensation Committee, the following policies and practices were in effect during 2012:

- IPG has only one-year employment agreements for executives, except for the Chief Executive Officer, who has a two-year employment agreement;
- no supplemental executive retirement plans (SERPs) or other nonqualified plans for executives;
- no payments are automatically made to executives upon a change in control (i.e., "single-trigger" arrangements);
- no repricing of underwater options;

- no tax gross-up payments for change in control payments under Section 280G of the Internal Revenue Code of 1980, as amended (the "Code")
- no tax gross-up payments for executive perquisites (which are minimal, in any event);
- no severance payments with respect to "for cause" terminations or resignations other than for "good reason";
- no perquisites for former or retired executives;
- no unreimbursed personal use of corporate aircraft, personal security services or executive life insurance;
- limits on award payouts under our annual short-term cash incentive plan;
- non-compete and Company protection provisions in certain non-qualified plans to better protect stockholder interests;
- stock ownership guidelines are in place for our executive officers and directors, all of whom comply with the guidelines;
- no hedging involving IPG stock; and
- only the Compensation Committee, comprised solely of independent directors meeting applicable independence standards, may approve equity grants.

How Executive Compensation is Determined

Role of the Compensation Committee. The Compensation Committee determines, approves and administers the compensation programs for our executive officers, including our Named Executive Officers. Our Compensation Committee is also responsible for making recommendations to the Board with respect to the adoption of equity plans and certain other benefit plans. The Compensation Committee may delegate authority whenever it deems appropriate, but it did not do so in 2012.

Our Compensation Committee's policy is to set executive officer pay in accordance with the objectives of the Company's compensation programs as described above. In our view, the Company's executive compensation program provides an overall level of compensation opportunity that is competitive with peer companies. Actual compensation levels may be greater or less than median compensation levels provided by similar companies based upon annual and long-term Company performance, as well as individual performance, contributions, skills, experience and responsibilities.

During 2012, the Compensation Committee was comprised of independent directors at all times. Mr. Blair, Chair, Mr. Hurley and Mr. Kampfe served on the Committee for the entire year. Dr. William Krupke served on the committee until September 2012. After his appointment to the Board, Mr. Peeler became a Committee member in September 2012. Mr. Blair has chaired the Committee since 2006.

Role of Executive Officers in Compensation Decisions. The Compensation Committee regularly meets with Dr. Gapontsev, our Chief Executive Officer, to obtain recommendations with respect to the compensation programs, practices and packages for our Named Executive Officers. Additionally, Mr. Mammen, our Chief Financial Officer, and Mr. Lopresti, our General Counsel, are regularly invited to meetings of the Compensation Committee or otherwise asked to assist the Committee. Such assistance includes providing financial and compensation information and analysis for the Compensation Committee and its compensation consultant, taking minutes of the meeting or providing legal advice, developing compensation proposals for consideration, and providing insights regarding our employees (executive and otherwise). The Named Executive Officers attend portions of

Compensation Committee meetings when requested, but leave the meetings as appropriate when matters that will potentially affect them personally or other executive officers including the Chief Executive Officer are discussed. Many meetings of the Compensation Committee are not attended by management. The Compensation Committee makes decisions regarding Dr. Gapontsev's compensation without him present. From time to time, outside legal counsel and the independent compensation consultant attend Compensation Committee meetings.

Role of Compensation Consultant. The Compensation Committee engaged Radford, an independent compensation consultant, to conduct a comprehensive review and analysis of our executive compensation program and to make recommendations for compensation related to 2012. The compensation consultant provides the Compensation Committee with an independent evaluation of executive compensation and is available as needed by the Compensation Committee to provide advice and counsel. Radford serves at the discretion of the Compensation Committee. Neither Radford nor Aon, Radford's parent company, does any other work for the Company. Aon is a global provider of many services relevant to the Company's business and the Company may retain other services from Radford or Aon as appropriate. The Compensation Committee has reviewed the independence of Radford in light of new SEC rules and NASDAQ listing standards regarding compensation consultants. The Compensation Committee believes that there are no actual or potential conflicts of interest with Radford in 2012. The Compensation Committee authorizes the compensation consultant to confer with management for perspective on the impact of compensation recommendations.

Pay Positioning Strategy

In 2012, we positioned the midpoint of the Company's target compensation ranges near the 50th percentile of the target compensation of our peer group, resulting in targeted total compensation that is competitive within our labor market for performance that meets the objectives established by the Compensation Committee. An individual's actual salary, non-equity incentive compensation opportunity and equity compensation may fall below or above the target position based on the individual's experience, seniority, skills, knowledge, performance and contributions as well as the Company's performance. These factors are weighed individually by the Compensation Committee in its judgment, and no single factor takes precedence over others nor is any formula used in making these decisions. The Chief Executive Officer's review of the performance of his direct reports is carefully considered by the Compensation Committee in making individual compensation decisions.

In analyzing our executive compensation program relative to this target market positioning, the Compensation Committee utilizes a comparative analysis of the compensation of our executive officers measured against a group of industry peer companies selected with the assistance of Radford and management input. The peer companies are companies in the laser source and photonics industry, as well as a broader group of technology companies of comparable size and complexity that have similar growth rates and international scope. Several factors were considered in selecting the peer group used in 2012, the most important of which were:

- Comparable business (primarily laser, photonics, semiconductor, optical components and related device companies); and
- Annual revenue and employee levels (primarily companies with between $231 million and $933 million in annual revenues, and between 400 and 6,200 employees).

Radford also supplements its peer analysis with the data from high-technology public company participants in the Radford Global Technology Survey having comparable revenue levels. For 2012, the peer companies were:

- II-VI Incorporated
- Brooks Automation, Inc.
- Cymer Inc.
- Entegris, Inc.
- Measurement Specialties, Inc.
- Opnext, Inc.
- Acme Packet, Inc.
- Cognex Corporation
- Diodes, Inc.
- FEI Company
- MKS Instruments, Inc.
- Rofin-Sinar Technologies Inc.
- Analogic Corporation
- Coherent, Inc.
- Electro Scientific Industries, Inc.
- Hittite Microwave Corporation
- Newport Corporation
- Veeco Instruments Inc.

The Compensation Committee reviews this peer group annually to ensure that the comparisons are meaningful. Given the continuing rapid growth of the Company, the Compensation Committee undertook a review of our historical peer group for the 2012 compensation analysis, applying the criteria above, and removed companies that were no longer viable peers due to acquisitions or that have financial profiles which are not well-aligned with ours. Removed were Evergreen Solar Inc., EXFO Electro-Optical Engineering Inc., FormFactor, Inc. and Varian Semiconductor Associates Inc. Added were Acme Packet, Inc., Analogic Corporation, Diodes, Inc., Entegris, Inc. and MKS Instruments, Inc.

Also, the Committee conducted a review of the peers of our peer companies for the 2013 compensation analysis to determine which companies are frequently referenced and whether they should be considered for inclusion in IPG's peer group. Based upon this review and applying the criteria above, the Compensation Committee made changes to our peer group for 2013. Added were Chart Industries, Inc., FLIR Systems, Inc., Graco, Inc., RBC Bearings, Inc., Riverbed Technology, Inc. and Teradyne, Inc. Removed were Acme Packet, Inc., Electro Scientific Industries, Inc., Measurement Specialties, Inc. and Opnext, Inc.

Components of Compensation in 2012

The principal components of our executive officer compensation during 2012 were base salary, short-term cash incentives, long-term equity incentive awards, severance benefits, retirement savings benefits provided under a 401(k) plan, executive perquisites, and benefit programs generally available to other employees.

These components were selected because the Compensation Committee believes that a combination of salary, incentive pay, severance and retirement savings benefits and perquisites is necessary to help us attract and retain the executive talent on which our success depends. The annual cash incentives are designed to allow the Compensation Committee to reward performance over a fiscal year and to provide an incentive for executives to appropriately balance their focus on short-term and long-term strategic goals. The fixed components, including salary, severance and retirement savings benefits and perquisites, are structured to provide a sufficient level of compensation for our executives relative to both immediate and long-term income needs. The Compensation Committee believes that, when taken together, these components are effective in achieving the objectives of our compensation program and philosophy and are reasonable relative to our strategy of managing total compensation near the 50th percentile of market practices.

The Compensation Committee annually reviews the entire compensation program with the assistance of its compensation consultant and outside legal counsel. However, the Compensation Committee may at any time review one or more components as necessary or appropriate to ensure such components remain competitive and appropriately designed to reward performance. In setting compensation levels for a particular Named Executive Officer, the Committee considers both individual and corporate factors.

Base Salary. We provide base salary to our Named Executive Officers and other employees to compensate them for services rendered on a day-to-day basis during the fiscal year. Unlike short-term cash incentives and long-term equity incentives, base salary is not subject to performance risk. The Compensation Committee reviews information provided by its compensation consultant and considers the experience, skills, knowledge and responsibilities of the executive and the individual's performance assessment provided by the Chief Executive Officer to assist it in evaluating base salary for each Named Executive Officer. With respect to the Chief Executive Officer, the Compensation Committee additionally considers the performance of the Company as a whole.

Based upon the information provided by its compensation consultant, the Compensation Committee approved merit increases of 5% for 2012 to the base salaries of the Named Executive Officers from prior year salary levels, except Dr. Gapontsev's base salary was increased by 17% to bring it in line with the market 25th percentile for CEOs from the peer group.

In February 2013, the Compensation Committee conducted an assessment of base salaries for the Named Executive Officers. After consulting with its compensation consultant, the Compensation Committee increased the target for base salary compensation near the 65th percentile of market practices, taking into account the increasing scale and complexity of the Company's operations, the strong performance of the Company and the importance of retaining an experienced team of proven executives. Based upon this and the selection of new peers for 2013, the Compensation Committee approved increases of 15% to the base salaries of the Named Executive Officers, except for Dr. Ovtchinnikov who received an increase of 20%.

Short-Term Incentive Plan. To focus each executive officer on the importance of the performance of the Company, a significant portion of the individual's potential short-term compensation is in the form of annual cash incentive pay that is tied to the achievement of goals established by the Compensation Committee.

Our Named Executive Officers participate in our Senior Executive Short-Term Incentive Plan (the "STIP"). The STIP is administered by the Compensation Committee, which has the discretion to determine the type of award, whether cash or non-cash, granted under the STIP. The STIP emphasizes company-wide performance goals in order to foster a shared commitment among executives. Generally, award levels for executives are the same percentage of salary, except for the Chief Executive Officer whose target award is at a greater percentage of salary than the other officers for achievement of the same performance goals. The Compensation Committee determines who is eligible to receive awards under the STIP, establishes performance goals and objectives for executives, establishes target awards for each participant for the relevant performance period, and determines the percentage of the target award that should be allocated to the achievement of each of the chosen performance goals in consultation with the Chief Executive Officer with respect to other executive officers. The target award percentages established by the Compensation Committee are chosen based upon a compensation review conducted by Radford and the seniority level of the executive.

For 2012, the Compensation Committee identified two financial performance measures: net sales and adjusted EBIT (excluding equity-based compensation expenses and expenses for approved litigation matters), each as determined under the STIP, and assigned a 50% weighting factor to each financial performance goal. The Compensation Committee chose to focus on revenue growth and pretax profits so that our executive officers would be incentivized to deliver the types of growth that benefit our stockholders, namely increasing sales and profits.

The Chief Executive Officer could receive a cash incentive payment ranging from 18.8% to 112.5% of his base salary, and other participants in the STIP could receive a cash incentive payment

ranging from 12.5% to 75.0% of their respective base salaries, based upon achievement of the minimum to maximum objectives for both financial performance measures. If the financial performance exceeds one or more of the maximum objectives, the incentive payments to the executive would increase as determined by linear interpolation, subject to limits on payouts discussed below. Consistent with our pay-for-performance philosophy, no cash incentive payments would be made if the minimum financial objectives established by the Compensation Committee in 2012 were not met.

While objectives were intended to be achievable by the Company, a maximum bonus would require very high levels of Company performance. The Compensation Committee believes that the goals are reasonably difficult to achieve, as demonstrated by the fact that the Company achieved only the maximum payout once before 2012. The Compensation Committee set minimum and maximum targets for net sales of $500 million and $676 million, respectively, representing annual growth levels of 5% to 42% from the prior year. The minimum and maximum targets for adjusted EBIT were set from $191 million to $286 million, representing increases of 3% to 55% from the prior year. The target levels for net sales and adjusted EBIT were $588 million and $239 million, respectively.

The Chief Executive Officer and the other Named Executive Officers were also eligible to receive awards of up to 25.0% and 16.7%, respectively, of their base salaries under the STIP in 2012, based upon their respective individual performances. The individual goals and objectives for the Chief Executive Officer included additional operational and strategic targets.

The overall target award (including both financial and individual performance measures) for the Chief Executive Officer was 100.0% of his base salary and 66.7% of the respective base salaries for the other participants. The financial objectives were the same for all executive officers. The range of possible payout amounts for 2012 under the STIP for achievement of financial objectives for each Named Executive Officer is shown below in the Grants of Plan-Based Awards table. The maximum possible payouts under the STIP for both financial and individual performance measures are 225.0% of the target award for the Named Executive Officers.

The Company's record financial performance for 2012 exceeded minimum financial performance targets set by the Compensation Committee but did not reach either of the target performance measures. The Company achieved net sales of $563 million and adjusted EBIT of $218 million. These results represented a 19% increase in net sales and an 18% increase in adjusted EBIT over 2011 levels. The Compensation Committee reviewed the Chief Executive Officer's goals and objectives set by the Compensation Committee with input from the independent directors and determined to award him 25.0% of his base salary for his individual performance during 2012. Also, the Compensation Committee, based upon input from the Chief Executive Officer, awarded the other Named Executive Officers 16.7% of their respective base salaries for their individual performances.

Based upon the Company's financial performance and the individual performance of the Named Executive Officers, the Compensation Committee made the following 2012 awards:

2012 Short-Term Incentive Plan Payouts

Name	Target Awards ($)(1)	Actual Awards ($)
Valentin P. Gapontsev, Ph.D.	472,000	369,850
Timothy P.V. Mammen	227,155	177,993
Eugene Scherbakov, Ph.D.	243,106	195,609
Angelo P. Lopresti	216,402	169,883
Alexander Ovtchinnikov, Ph.D.	202,004	158,286

(1) Target Awards include both financial and individual performance targets.

The Compensation Committee may make adjustments to our overall corporate performance goals and the ways that our actual performance results are calculated that may cause differences between the numbers used for our performance goals and the numbers reported in our financial statements. These adjustments may exclude all or a portion of both the positive or negative effect of external events that are outside the control of our executives. The Compensation Committee made no such adjustments for the 2012 STIP.

Long-Term Equity-Based Incentives. The goal of our equity-based award program is to provide employees and executives with the perspective of an owner with a long-term financial stake in our success, further increasing alignment with stockholders. Long-term incentive awards also incent employees to stay with us for longer periods of time, which in turn provides us with greater stability and directly links compensation to the long-term performance of the Company We review long-term equity incentives for our Named Executive Officers and other executives annually.

For our Named Executive Officers, our equity-based award program is based on annual grants of service-based stock options and restricted stock units. Of the equity-based awards, 75% is typically in the form of stock options and 25% is typically in the form of restricted stock units. Consistent with our pay-for-performance philosophy, the service-based stock option awards have no value unless the stock price increases after the grant date and the value of the restricted stock units is tied to the value of our stock.

Since the Company's initial public offering in 2006, the Chief Executive Officer did not receive any equity compensation awards. As the Company's founder and holder of a large number of our shares, he has the perspective of an owner with a significant financial stake in the Company's success.

In 2012, the Compensation Committee targeted granting equity compensation near the 50th percentile of the target compensation of our peer group, balancing the perspective of delivering competitive compensation based upon Black-Scholes option pricing values and as a percentage of the Company. The Compensation Committee analyzed several aspects of the equity grant program, including (i) the "in the money" value, the degree to which executives have incentives to remain employed by the Company through unvested option values, and (ii) the aggregate equity usage in terms of (a) annual usage, typically called burn rate, and (b) cumulative equity delivery, typically called overhang, to determine the dilutive effect of equity awards on investors. The majority of outstanding equity holdings of the executives (other than Dr. Gapontsev) were allocated to unvested shares in the aggregate, and all such executives had a minimum of four years' worth of annual award values in unvested equity value. Based upon this information, Radford advised the Compensation Committee that our equity program provides strong retention incentives.

The following table shows grants of service-based stock options and service-based restricted stock units to the Named Executive Officers in 2012:

2012 Long-Term Equity-Based Incentive Grants

Name	Service-Based Stock Options (#)	Service-Based Restricted Stock Units (#)
Valentin P. Gapontsev, Ph.D.	—	—
Timothy P.V. Mammen	12,500	2,050
Eugene Scherbakov, Ph.D.	12,500	2,050
Angelo P. Lopresti	11,750	1,920
Alexander Ovtchinnikov, Ph.D.	11,750	1,920

Consistent with past practice as explained above, the Chief Executive Officer did not receive any equity-based award in 2012. The equity awards in 2012 vest in four equal quarterly installments

commencing on March 31, 2016, and provide a strong incentive for executives to remain employed by us and to focus on increasing our financial performance over the long-term. The stock options awarded to the executives in 2012 have an exercise price of $58.65 per share.

Equity Grant Process. The Compensation Committee adopted an equity grant policy as follows:

- only the Compensation Committee has the authority to approve equity grants;
- grants made by the Compensation Committee occur only after discussion at a meeting of the Compensation Committee;
- equity award grants ordinarily are made by the Compensation Committee only during an open trading window period under our insider trading policy;
- the grant date ordinarily is within five business days following the first day of the open trading window period, or such other date as the Compensation Committee determines; and
- the exercise price (if applicable) for all equity awards is the closing price of our stock on the date of grant and stock options are granted with an exercise price of no less than the closing price of our stock on the grant date.

For grants of equity awards commencing in 2013, the Compensation Committee revised the equity grant policy to provide that the grant date is ordinarily within ten business days following the release of the Company's earnings, or such other date as the Compensation Committee determines.

The Compensation Committee considers the aggregate equity usage by the Company compared to peer companies. Measures which are considered include total options and restricted stock units granted as a percentage of total shares issued and outstanding, total options and unvested restricted stock units outstanding as a percentage of total shares issued and outstanding, and total options and unvested restricted stock units outstanding plus shares available for future grant as a percentage of total shares issued and outstanding. In its 2012 assessment, Radford found that the one- and three-year burn rates for the Company were low when compared to our peer group, and that the 2011 overhang rate approximated the 25th percentile of the peer group.

Severance Benefits. The Compensation Committee believes that severance benefits are an important element of the executive compensation package. The severance benefits we offer assist us in recruiting and retaining talented individuals and are consistent with the severance benefits offered by our peer group. At the request of the Compensation Committee, Radford examined the severance benefits provided by the employment agreements then in effect with the Named Executive Officers and compared them to the severance benefits provided by the peer group. The severance benefits reviewed included termination provisions, change in control provisions, cash severance payments, benefits continuation, acceleration of equity awards, non-competition and non-solicitation restrictions. The severance provisions of our employment agreements are summarized below in the section entitled *"Potential Payments upon Termination or Change in Control."*

Retirement Savings Plan. Executive officers in the United States are eligible to participate in our 401(k) retirement plan on the same terms as all other U.S. employees. Our 401(k) retirement plan is a tax-qualified plan and therefore is subject to certain Internal Revenue Code limitations on the dollar amounts of deferrals and Company contributions that can be made to plan accounts. These limitations apply to our more highly-compensated employees (including the Named Executive Officers). We made matching contributions at a rate of 50% of eligible contributions under the 401(k) retirement plan to our employees, including Named Executive Officers, which participate in the plan as set forth in the Summary Compensation Table. Our executives outside of the United States participate in government-sponsored retirement programs. We do not maintain a supplemental executive retirement plan (SERP) or a non-qualified deferred compensation plan for our executives or directors.

Other Compensation and Personal Benefits. All of our executives are eligible to participate in our employee benefit plans, including medical, dental, life and disability insurance, vacation and employee stock purchase plans. These plans generally are available to all salaried employees and do not discriminate in favor of executive officers. Benefits are intended to be competitive with the overall market in order to facilitate attraction and retention of high-quality employees. The Compensation Committee reviewed the executive perquisites in comparison to the peer group and made no changes in 2012 or 2011. The Company provides Dr. Scherbakov with the use of an automobile, as it does to other high-ranking employees in Germany. The Company purchases, from time to time, hourly use of an aircraft for the Chief Executive Officer and other executives for business travel integral to the performance of their duties. The Chief Executive Officer is encouraged to use the aircraft for efficiency, safety and security. The Compensation Committee adopted an aircraft use policy governing the use of the aircraft which the Company makes available to the executives. We permit only our Chief Executive Officer to use time on the aircraft for personal use only if he reimburses the Company for all costs related to personal use. There is no aircraft-related compensation in the Summary Compensation Table because unreimbursed use did not occur. We do not provide our executives with country club memberships, club dues or fees. Nor do we provide home security, tax preparation, estate planning or financial counseling

Other Factors Affecting Compensation

Tax Deductibility under Section 162(m). Section 162(m) of the Code ("Section 162(m)"), limits the deductibility for federal income tax purposes of certain compensation paid in any year by a publicly held corporation to its chief executive officer and its three other most highly compensated officers other than its chief financial officer to $1 million per executive (the "$1 million cap"). The $1 million cap does not apply to "performance-based" compensation as defined under Section 162(m). The Compensation Committee's policy with respect to Section 162(m) is to consider the tax deductibility of awards as a factor in the compensation setting process and to generally make a reasonable effort to cause compensation to be deductible by the Company while simultaneously providing our executive officers with appropriate rewards for their performance, but the Compensation Committee retains the discretion to provide compensation that may exceed the $1 million cap or not qualify for the performance-based compensation exception to Section 162(m).

Accounting Considerations. We consider the accounting implications of all aspects of its executive compensation program. In addition, accounting treatment is just one of many factors impacting plan design and pay determinations. Our executive compensation program is designed to attempt to achieve the most favorable accounting and tax treatment possible as long as doing so does not conflict with intended plan design or program objectives.

Advisory Vote on Executive Compensation

Say-on-Pay Advisory Votes. We conducted our first advisory vote on executive compensation at our 2011 annual meeting of stockholders. While this vote was not binding on the Company, our Board or the Compensation Committee, we believe that it is important for our stockholders to have an opportunity to vote on this proposal as a means to express their views regarding our executive compensation philosophy, our compensation policies and programs, and our decisions regarding executive compensation, all as disclosed in our proxy statement.

Our stockholders overwhelmingly approved our executive compensation structure in our first "say-on-pay" advisory vote at our 2011 annual meeting of stockholders, voting 40,928,468 shares (99.2%) in favor of our executive compensation structure compared to 305,747 shares (0.7%) against with 43,328 shares (0.1%) abstaining. Because a substantial majority of our stockholders approved the compensation program described in our 2011 proxy statement, the Compensation Committee did not implement changes to our executive compensation program in 2012 as a direct result of the

stockholders' advisory vote. At our stockholders meeting in 2011, the advisory proposal to hold "say-on-pay" advisory votes every three years received the greatest amount of votes. Accordingly, the next "say-on-pay" advisory vote will be held at our 2014 annual meeting of stockholders.

In addition to the periodic advisory vote on executive compensation, we are committed to ongoing engagement with our stockholders on executive compensation and corporate governance issues. These engagement efforts take place throughout the year through meetings, telephone calls and correspondence involving our senior management and representatives of our stockholders. The Compensation Committee carefully considers feedback from our stockholders regarding our executive compensation program, including the results of our stockholders' advisory vote on executive compensation. Stockholders are invited to express their views to the Compensation Committee as described in this proxy statement under the heading "Corporate Governance — Stockholder Communication with our Board of Directors."

EXECUTIVE COMPENSATION TABLES

Summary Compensation Table

The following table sets forth information regarding compensation earned by our Chief Executive Officer, our Chief Financial Officer and our three other most highly compensated executives:

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)(1)	Option Awards ($)(1)	Non-Equity Incentive Plan Compensation ($)(2)	All Other Compensation ($)(3)	Total ($)
Valentin P. Gapontsev, Ph.D., Chief Executive Officer and Chairman of the Board(4)	2012	475,822	—	—	—	369,850	12,345	858,017
	2011	418,167	—	—	—	808,306	16,261	1,242,734
	2010	393,735	—	—	—	512,682	15,879	922,296
Timothy P.V. Mammen, Chief Financial Officer and Vice President	2012	340,101	—	120,233	353,768	177,993	8,040	1,000,135
	2011	324,500	—	198,912	511,080	421,623	7,890	1,464,005
	2010	295,000	—	69,213	180,144	295,000	7,890	847,247
Eugene Scherbakov, Ph.D., Managing Director of IPG Laser and Director(4)	2012	364,382	—	120,233	353,768	195,609	30,287	1,064,279
	2011	376,187	—	176,602	449,561	488,452	32,576	1,523,378
	2010	340,685	—	69,213	180,144	340,451	33,220	963,713
Angelo P. Lopresti, General Counsel, Secretary and Vice President	2012	324,606	—	112,608	332,542	169,883	8,310	947,949
	2011	309,750	31,997	176,602	449,561	402,458	8,160	1,378,528
	2010	295,000	—	69,213	180,144	295,000	8,160	847,517
Alexander Ovtchinnikov, Ph.D., Vice President — Components	2012	302,452	—	112,608	332,542	158,286	8,742	914,630
	2011	288,750	—	176,602	449,561	375,173	8,592	1,298,678
	2010	275,000	—	69,213	180,144	275,000	7,897	807,254

(1) Valuation based on the fair value of such award as of the grant date determined pursuant to ASC Topic 718. The assumptions that we used with respect to the valuation of restricted stock unit and stock option awards are set forth in Note 2 to our Consolidated Financial Statements in our Annual Report on Form 10-K filed with the SEC on February 28, 2013.

(2) Represents amounts earned under our STIP for services rendered in 2012, 2011 and 2010, respectively.

(3) The amount in 2012 for Dr. Gapontsev consists of (i) $11,125 in premiums paid for group term life insurance and (ii) $1,220 in health care premiums paid in Germany. Amounts for Messrs. Mammen and Lopresti and Dr. Ovtchinnikov include matching contributions to retirement accounts under our 401(k) plan and our payment of group term life insurance premiums. The amount for Dr. Scherbakov reflects the expense of an automobile provided by us.

(4) Portions of the amounts paid to Dr. Gapontsev and Dr. Scherbakov were denominated in Euros and Rubles. These were translated into U.S. Dollars at the average daily exchange rates for the full years. The average daily rates in 2012, 2011 and 2010, for the Euro were 0.78, 0.72 and 0.74, respectively; and for the Ruble were 31.17, 29.29 and 30.43, respectively. As a result of compensation being paid in one or more currencies that fluctuate against the U.S. Dollar, the amount of salary paid may vary slightly from the salary stated in an employment agreement.

Employment Agreements

We have employment agreements with each of the executives named in the table above. The employment agreements expire on December 31, 2013, except for the agreement with Dr. Gapontsev, which expires on December 31, 2014. In the event of a change in control, the agreements would be extended to expire on the second anniversary of such change in control.

The employment agreements set the annual base salaries in 2012 for the Named Executive Officers as follows: $472,000 for Dr. Gapontsev, €283,350 for Dr. Scherbakov ($364,203 at the 2012 average daily exchange rate), $340,725 for Mr. Mammen, $325,200 for Mr. Lopresti and $303,000 for Dr. Ovtchinnikov. For 2013, the annual base salaries increase to $542,800 for Dr. Gapontsev, €325,844 for Dr. Scherbakov ($418,822 at the 2012 average daily exchange rate), $391,834 for Mr. Mammen, $373,980 for Mr. Lopresti and $363,600 for Dr. Ovtchinnikov. The agreements entitle these executive officers to participate in bonus plans, standard insurance plans such as life, short-term disability and long-term disability insurance and retirement benefits, such as the 401(k) plan and equity award plans described above, on similar terms and on a similar basis as such benefits are available to executives at similar levels within the Company. Each of these executive officers also entered into a non-competition agreement with the Company in 2008 that prohibits each of them from competing with the Company for a period of one year after the termination of his employment with the Company for any reason and from hiring or attempting to hire the Company's employees or soliciting customers or suppliers of the Company for a period ending eighteen months following the termination of his employment for any reason. Each of the officers is entitled to receive his base salary for the period during which the Company enforces the non-competition provisions of the agreement but not for more than one year following the termination of his employment. The severance provisions of the agreements are summarized below in the section titled *"Potential Payments upon Termination or Change in Control."*

Grants of Plan-Based Awards Table

The following table sets forth information regarding plan-based awards to our Named Executive Officers in 2012:

Name	Grant Date	Estimated Possible Payouts Under Non-Equity Incentive Plan Awards ($)(1)			All Other Stock Awards: Number of Shares of Stock or Units(#)(2)	Option Awards Number of Securities Underlying Options (#)(2)	Exercise or Base Price of Option Awards ($ / Sh)	Grant Date Fair Value of Stock and Option Awards ($)(3)
		Threshold	Target	Maximum				
Valentin P. Gapontsev, Ph.D.	2/14/2012	88,500	354,000	1,062,000	—	—	—	—
Timothy P.V. Mammen	2/14/2012	42,591	170,363	511,113	—	—	—	—
	2/14/2012	—	—	—	2,050	—	—	120,233
	2/14/2012	—	—	—	—	12,500	58.65	353,750
Eugene Scherbakov, Ph.D.	2/14/2012	45,581	182,326	547,005	—	—	—	—
	2/14/2012	—	—	—	2,050	—	—	120,233
	2/14/2012	—	—	—	—	12,500	58.65	353,750
Angelo P. Lopresti	2/14/2012	40,650	162,600	487,824	—	—	—	—
	2/14/2012	—	—	—	1,920	—	—	112,608
	2/14/2012	—	—	—		11,750	58.65	332,525
Alexander Ovtchinnikov, Ph.D.	2/14/2012	37,875	151,500	454,523	—	—	—	—
	2/14/2012	—	—	—	1,920	—	—	112,608
	2/14/2012	—	—	—	—	11,750	58.65	332,525

(1) Amounts shown represent potential amounts under the STIP for 2012 for achievement of financial performance measures, except that the possible payouts in the "Maximum" column represent the maximum permitted payout under the STIP for 2012 for both financial and individual performance measures. The performance goals used in determining STIP payments are discussed in the "Compensation Discussion and Analysis" above. Actual amounts paid for 2012 performance are shown in the "Non-Equity Incentive Plan Compensation" column in the Summary Compensation Table above.

(2) The amounts listed reflect restricted stock units and stock options granted under our 2006 Incentive Compensation Plan and are described in the Outstanding Equity Awards Table below.

(3) Valuation based upon the fair value of such award as of the grant date determined pursuant to ASC Topic 718. The assumptions that we used with respect to the valuation of restricted stock unit and stock option awards are set forth in Note 2 to our Consolidated Financial Statements in our Annual Report on Form 10-K filed with the SEC on February 28, 2013. The option exercise price has not been deducted from the amounts indicated above. Regardless of the value placed on a restricted stock unit or stock option on the grant date, the actual value of the restricted stock unit or stock option will depend on the market value of our common stock at such date in the future when the restricted stock unit vests or the stock option is exercised.

Outstanding Equity Awards Table

The following table provides information regarding unexercised stock options and restricted stock units held by each of our Named Executive Officers as of December 31, 2012:

Name	Grant Date	Securities Underlying Unexercised Options (#) Exercisable	Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)(1)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)(2)
Valentin P. Gapontsev, Ph.D.	—	—	—	—	—	—	—
Timothy P.V. Mammen	9/22/2005	1,333	—	1.88	9/22/2015	—	—
	4/18/2006	13,334	—	5.37	4/18/2016	—	—
	5/9/2008	16,667	8,333(3)	19.69	5/8/2018	—	—
	2/26/2009	13,281	—	8.26	2/25/2019	—	—
	2/26/2009	15,625	9,375(4)	8.26	2/25/2019	—	—
	2/26/2010	—	26,250(5)	15.82	2/25/2020	—	—
	2/26/2010	—	—	—	—	4,375(5)	291,594
	3/1/2011		21,600(6)	53.76	2/28/2021	—	
	3/1/2011	—	—	—	—	3,700(6)	246,605
	2/14/2012	—	12,500(7)	58.65	2/13/2022	—	—
	2/14/2012	—	—	—	—	2,050(7)	136,633
Eugene Scherbakov, Ph.D.	5/9/2008	8,334	7,333(3)	19.69	5/8/2018	—	—
	2/26/2009	1,461	—	8.26	2/25/2019	—	—
	2/26/2009	13,750	8,250(4)	8.26	2/25/2019	—	—
	2/26/2010	—	26,250(5)	15.82	2/25/2020	—	—
	2/26/2010	—	—	—	—	4,375(5)	291,594
	3/1/2011		19,000(6)	53.76	2/28/2021	—	
	3/1/2011	—	—	—	—	3,285(6)	218,945
	2/14/2012	—	12,500(7)	58.65	2/13/2022	—	—
	2/14/2012	—	—	—	—	2,050(7)	136,633

Name	Grant Date	Securities Underlying Unexercised Options (#) Exercisable	Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)(1)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)(2)
Angelo P. Lopresti	5/9/2008	13,333	6,667(3)	19.69	5/8/2018	—	—
	2/26/2009	10,625	—	8.26	2/25/2019	—	—
	2/26/2009	12,500	7,500(4)	8.26	2/25/2019	—	—
	2/26/2010	—	26,250(5)	15.82	2/25/2020	—	—
	2/26/2010	—	—	—	—	4,375(5)	291,594
	3/1/2011	—	19,000(6)	53.76	2/28/2021	—	
	3/1/2011	—	—	—	—	3,285(6)	218,945
	2/14/2012	—	11,750(7)	58.65	2/13/2022	—	—
	2/14/2012	—	—	—	—	1,920(7)	129,968
Alexander Ovtchinnikov, Ph.D.	5/9/2008	—	7,333(3)	19.69	5/8/2018	—	—
	2/26/2009	—	8,250(4)	8.26	2/25/2019	—	—
	2/26/2010	—	26,250(5)	15.82	2/25/2020	—	—
	2/26/2010	—	—	—	—	4,375(5)	291,594
	3/1/2011	—	19,000(6)	53.76	2/28/2021	—	—
	3/1/2011	—	—	—	—	3,285(6)	218,945
	2/14/2012	—	11,750(7)	58.65	2/13/2022	—	—
	2/14/2012	—	—	—	—	1,920(7)	129,968

(1) Represents the fair market value of a share of our common stock on the grant date.
(2) Based upon the closing price of our common stock on December 31, 2012, which was $66.65 per share.
(3) Assuming the continued service of the Named Executive Officer, 1/12th of the options vest in monthly installments commencing on May 9, 2012.
(4) Assuming the continued service of the Named Executive Officer, 1/32nd of the options vest in monthly installments commencing on May 1, 2011.
(5) Assuming the continued service of the Named Executive Officer, the options and restricted stock units vest in four equal quarterly installments commencing on March 31, 2014.
(6) Assuming the continued service of the Named Executive Officer, the options and restricted stock units vest in four equal quarterly installments commencing on March 31, 2015.
(7) Assuming the continued service of the Named Executive Officer, the options and restricted stock units vest in four equal quarterly installments commencing on March 31, 2016.

Option Exercises and Stock Vested Table

The following table provides information regarding stock option exercises by our Named Executive Officers in 2012:

	Option Awards	
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise($)(1)
Valentin P. Gapontsev, Ph.D.	—	—
Timothy P.V. Mammen	2,000	125,100
Eugene Scherbakov, Ph.D.	19,667	992,309
Angelo P. Lopresti	6,667	332,888
Alexander Ovtchinnikov, Ph.D.	24,979	1,172,533

(1) The value realized is based on the difference between the reported closing common stock price on the date of exercise, and the exercise price of the stock option.

Pension Benefits

None of our Named Executive Officers participates in or has an account balance in qualified or nonqualified defined benefit pension plans sponsored by us. The Compensation Committee may elect to adopt qualified or nonqualified defined benefit pension plans in the future.

Nonqualified Deferred Compensation

None of our Named Executive Officers participates in or has an account balance in any nonqualified defined contribution plans or other nonqualified deferred compensation plans maintained by us. The Compensation Committee may elect to adopt non-qualified defined contribution plans or other nonqualified deferred compensation plans in the future.

Potential Payments upon Termination or Change in Control

If the Company terminates the employment of any of the Named Executive Officers without cause (as defined in the respective employment agreements) or any of the Named Executive Officers terminates his employment for good reason (as defined in the respective employment agreements), then the officer would receive:

(a) continuation of salary for twelve months, except in the case of Dr. Gapontsev, who would receive continuation of salary for twenty-four months;

(b) a portion of the annual bonus that the executive would have received had he remained employed through the end of the applicable bonus period (such portion based upon the percentage of the year that he was employed by the Company);

(c) continuation of medical and dental benefits for twelve months;

(d) accelerated vesting of equity compensation awards granted after the date of the agreement that otherwise would have vested within twelve months of termination of employment; and

(e) full accelerated vesting of equity compensation awards granted after the date of the agreement if such termination occurs within twenty-four months following a change in control (as defined in the 2006 Plan).

If the employment period of any of the Named Executive Officers terminates and the Company does not offer such officer continued employment in the same or a substantially similar position and at a compensation level that is the same or substantially similar to the compensation level in effect at the end of the employment period, then such officer would receive the compensation and benefits described in (a) and (b) above. An officer would also receive the payments described in (b) above if his employment is terminated by death or disability.

Under the employment agreements, the Company is not obligated to make any cash payments if employment is terminated by the Company for cause or by the executive not for good reason. Payments to the officers are conditioned upon the release of claims by the Named Executive Officer in favor of the Company.

A change in control of the Company does not affect the amount of any cash severance payments payable under the employment agreements and no amounts are due to the Named Executive Officers solely due to a change in control of the Company. Upon a change in control, the officers' employment periods under the agreements would automatically be extended to the second anniversary of the change in control. The 2006 Plan provides for accelerated vesting of an award if a change in control occurs followed within two years by a termination of employment without cause or for good reason.

The following table provides information regarding compensation and benefits that would be payable to our Named Executive Officers as of December 31, 2012 upon a termination of employment or change in control. The bonus severance was calculated assuming attainment of the financial performance targets and the maximum individual performance under the 2012 STIP. There can be no assurance that the event triggering payments would produce the same or similar results as those described below if such event occurs on any other date or at any other price, or if any other assumption used to estimate the potential payments and benefits is incorrect. Any actual payments and benefits may be different due to a number of factors that affect the nature and amount of any potential payments or benefits.

Name	Benefit	Termination Without Cause or For Good Reason ($)(1)	Termination Without Cause or For Good Reason Following a Change in Control ($)(1)
Valentin P. Gapontsev, Ph.D.	Salary, Severance and Benefits Continuation	953,552	953,552
	Incentive Plan Severance	472,000	472,000
	Equity acceleration	—	—
	Total	1,425,552	1,425,552
Timothy P.V. Mammen	Salary, Severance and Benefits Continuation	353,221	353,221
	Incentive Plan Severance	227,165	170,373
	Equity acceleration	936,068	3,313,039
	Total	1,516,454	3,836,633
Eugene Scherbakov, Ph.D.	Salary, Severance and Benefits Continuation	369,031	369,031
	Incentive Plan Severance	243,106	182,326
	Equity acceleration	823,738	3,139,988
	Total	1,435,875	3,691,345

Name	Benefit	Termination Without Cause or For Good Reason ($)(1)	Termination Without Cause or For Good Reason Following a Change in Control ($)(1)
Angelo P. Lopresti	Salary, Severance and Benefits Continuation	337,696	337,696
	Incentive Plan Severance	216,204	162,000
	Equity acceleration	748,882	3,050,600
	Total	1,302,782	3,550,296
Alexander Ovtchinnikov, Ph.D.	Salary, Severance and Benefits Continuation	315,444	315,444
	Incentive Plan Severance	202,004	151,500
	Equity acceleration	823,738	3,125,455
	Total	1,341,186	3,592,399

(1) Equity acceleration is calculated using the full value of restricted stock units based upon the closing sale price of our common stock on December 31, 2012 of $66.65 per share and the aggregate difference between the exercise prices of stock options and the closing price of our common stock on December 31, 2012.

Compensation Risk Assessment Review

Management conducts an annual risk assessment of the Company's compensation policies and practices for all employees, including non-executive officers, and reports its findings to the Compensation Committee. In 2012, management concluded that the Company's compensation policies and practices are balanced and do not motivate imprudent risk taking. The Company's compensation programs reward consistent, long-term performance by heavily weighting compensation to long-term incentives that reward sustainable financial and operating performance and imposing lengthy vesting schedules. The Company's annual incentive compensation is based on performance measures that promote progress towards longer-term goals and is capped at sustainable levels. The Company believes that it has appropriate procedures in place to mitigate material risks, if any, from its compensation practices and policies.

EQUITY COMPENSATION PLANS

Equity Plans

In February 2006, our Board of Directors adopted our 2006 Incentive Compensation Plan, which was approved by our stockholders as a successor plan to the 2000 Incentive Compensation Plan (under which awards may no longer be made). The 2006 Plan was amended in May 2011 upon approval by our stockholders at the 2011 annual stockholders' meeting. The maximum number of shares that may be awarded under the 2006 Plan is 10,084,273. Other than the number of shares reserved, the plans are substantially similar. Each plan terminates ten years after its adoption, unless terminated earlier by our Board.

The 2000 Plan and the 2006 Plan, as amended, are administered by the Compensation Committee. The Compensation Committee approves awards under the Plans, including the exercise price and other terms of each award, subject to the provisions of the Plans and has general authority to administer the Plans.

Each Plan authorizes the grant of options to purchase common stock intended to qualify as incentive stock options, as defined in Section 422 of the Internal Revenue Code, and nonstatutory stock options. The Plans also provide for awards of restricted stock, stock units, performance shares, performance units, stock appreciation rights and cash awards.

Our officers, directors, employees, consultants and advisors are eligible to receive awards under the Plans. No participant may receive awards for over 1,666,667 shares of common stock in any calendar year under the 2006 Plan, as amended.

In June 2006, our Board adopted our Non-Employee Directors Stock Plan (the Non-Employee Director Plan) which was approved by our stockholders. Only our non-employee directors are eligible to receive awards under the Non-Employee Director Plan. A total of 486,666 shares are reserved for issuance under the Non-Employee Director Plan. The Non-Employee Director Plan terminates ten years after its adoption, unless terminated earlier by our Board. The Non-Employee Director Plan authorizes the grant of options to purchase common stock that are not intended to qualify as incentive stock options, as defined in Section 422 of the Code. The Plan also provides for awards of stock appreciation rights, stock units, stock awards and cash awards.

Awards granted or paid under the 2006 Plan, as amended, will be subject to any compensation recovery policy established by the Company and amended from time to time. The 2006 Plan, as amended, expressly forbids the repricing or cancellation of underwater stock options.

The 2000 Plan provides that, upon a change in control of our company, the Compensation Committee may, in its sole discretion, accelerate the time for exercise or payout of all outstanding awards, cancel the award after notice to the holder of an outstanding award as long as the holder receives a payment equal to the difference between the fair market value of the award on the date of the change in control and the exercise price per share, if any, of such award, or provide that all outstanding awards will be either assumed by the entity that acquires control or substituted for similar awards by such entity. The 2006 Plan, as amended, provides for accelerated vesting of an award only if the participant experiences a termination of employment without cause or the employer terminates employment for good reason within two years after a change in control (a so-called "double-trigger"), rather than providing for immediate vesting upon a change in control ("single-trigger").

In addition, in the event that the 2000 Plan or 2006 Plan, as amended, is terminated due to a merger or acquisition of the Company, the Compensation Committee has the right, but not the obligation, to direct the repurchase of outstanding stock options at a price equal to the fair market value of the shares subject to the repurchased options less the exercise price per share.

The Non-Employee Director Plan provides that awards become fully vested and exercisable upon a change in control. The Plan defines a "change in control" as the occurrence of any of the following:

- any person becomes a beneficial owner of our securities representing at least 50% of the combined voting power of our then-outstanding securities;
- persons who, at the beginning of any period of two consecutive years, were members of the Board of Directors cease to constitute a majority of the Board of Directors unless the election or nomination for election by the stockholders of each new director during that two-year period is approved by at least two-thirds of the incumbent directors then still in office;
- the occurrence of a merger, sale of all or substantially all of our assets, cash tender or exchange offer, contested election or other business combination under circumstances in which our stockholders immediately prior to such merger or other such transaction do not, after such transaction, own shares representing at least a majority of our voting power or the surviving or resulting corporation, as the case may be; or
- our stockholders approve a complete liquidation.

Employee Stock Purchase Plan

We maintain an employee stock purchase plan, which is intended to be qualified under Section 423 of the Code. Each of our U.S. employees and a limited group of our German employees who customarily work more than 20 hours per week and more than five months in any calendar year is eligible to participate in this plan after completing six months of service. To participate in the plan, an employee may designate prior to the commencement of a six-month offering period the amount of payroll deductions to be made from his or her paycheck for the purchase of shares of our common stock under the plan, which amount may not exceed 10% of his compensation. On each purchase date, shares of our stock are purchased automatically for each participant with the amounts withheld from his or her payroll deductions at a price equal to 85% of the lesser of the fair market value of the shares on the purchase date or the fair market value of the shares on the first day of the offering period. An employee may not participate in an offering period if, immediately after the purchase of shares, the employee would own shares or hold options to purchase shares of our stock possessing 5% or more of the total combined voting power or value of all classes of our stock. The employee stock purchase plan includes a "Non-Code Section 423 Component" for the employees of subsidiaries outside the United States.

COMPENSATION COMMITTEE REPORT

The Compensation Committee of the Board of Directors has reviewed and discussed with management the Compensation Discussion and Analysis included in this proxy statement. Based on this review and discussion, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in the Company's proxy statement for the Company's 2013 annual meeting of stockholders, and in the Company's Annual Report on Form 10-K for the year ended December 31, 2012.

COMPENSATION COMMITTEE

Robert A. Blair, *Chair*
William S. Hurley
Michael R. Kampfe
John R. Peeler

April 3, 2013

OTHER MATTERS

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 requires our directors and executive officers, and persons who beneficially own more than 10% of a registered class of our equity securities to file reports of ownership of, and transactions in, our securities with the SEC. These directors, executive officers and 10% stockholders are also required to furnish us with copies of all Section 16(a) forms that they file. Based solely on its review of such forms received by it and the written representations of its Reporting Persons, the Company has determined that no such persons known to it were delinquent with respect to their reporting obligations as set forth in Section 16(a) of the Exchange Act, other than the following: (i) the Named Executive Officers, other than the Chief Executive Officer, reported late the grants of stock options and restricted stock units on February 14, 2012, (ii) Mr. Child reported late on Form 4 his sale of 89 shares on March 7, 2012 and (iii) Dr. Krupke reported late his exercise of options and sale of 3,529 shares on July 25, 2012. The Forms 4 respecting such transactions were subsequently filed.

2014 Annual Meeting and Nominations

Stockholders may present proposals for action at a future meeting and nominations for director if they comply with applicable SEC rules and our by-laws. If you would like us to consider including a proposal in our proxy statement or nominating a director next year, it must be received by our Secretary, at IPG Photonics Corporation, 50 Old Webster Road, Oxford, Massachusetts 01540, on or before December 10, 2013. If you would like to present a proposal at the 2013 annual meeting, but not to have such proposal included in our proxy statement relating to that meeting, such proposal must be received by our Secretary not earlier than February 4, 2014 and not later than March 6, 2014. Our by-laws contain additional specific requirements regarding a stockholder's ability to nominate a director or to submit a proposal for consideration at an upcoming meeting. Our by-laws require that the notice to the Company include (i) information relating to the name, age and experience of the nominee and such other information concerning such nominee as would be required under the then-current rules of the SEC to be included in a proxy statement soliciting proxies for the election of the nominee, (ii) the nominee's written consent to being named in the proxy statement and serving as a director, if elected and (iii) the name and address of the record holder and beneficial holder of the shares, the number of shares held of record or beneficially owned, and representations as described in our by-laws. If the Nominating and Corporate Governance Committee or the Board determines that any nomination made by a stockholder was not made in accordance with the Company's procedures, the rules and regulations of the SEC or other applicable laws or regulations, such nomination will be void. If you would like a copy of the requirements contained in our by-laws, please contact our Secretary.

No Incorporation by Reference

In our filings with the SEC, information is sometimes "incorporated by reference." This means that we are referring you to information that has previously been filed with the SEC and the information should be considered as part of the particular filing. As provided under SEC regulations, the "Audit Committee Report" and the "Compensation Committee Report" contained in this proxy statement specifically are not incorporated by reference into any of our other filings with the SEC, are not to be deemed soliciting materials or subject to the liabilities of Section 18 of the Exchange Act. In addition, this proxy statement includes several website addresses. These website addresses are intended to provide inactive, textual references only. The information on these websites is not part of this proxy statement.

Notes

Notes

Notes

directors

Valentin P. Gapontsev, Ph.D.
Chief Executive Officer and Chairman of the Board

Eugene Scherbakov, Ph.D.
Director

Igor Samartsev
Director

Robert A. Blair (1) (2)
Director

Michael C. Child (2) (3)
Director

Henry E. Gauthier (3)
Presiding Independent Director

William S. Hurley (1) (3)
Director

Michael Kampfe (1)
Director

William F. Krupke, Ph.D. (2)
Director

John R. Peeler (1)
Director

executive officers

Valentin P. Gapontsev, Ph.D.
Chief Executive Officer and Chairman of the Board

Eugene Scherbakov, Ph.D.
Managing Director, IPG Laser GmbH
and Senior Vice President, Europe

Timothy P.V. Mammen
Chief Financial Officer and Senior Vice President

Angelo P. Lopresti
General Counsel, Secretary and Senior Vice President

Alexander Ovtchinnikov, Ph.D.
Senior Vice President, Components

Trevor D. Ness
Senior Vice President, World Wide Sales and Marketing

Felix Stukalin
Senior Vice President, U.S. Operations

Igor Samartsev
Chief Technology Officer

David Gray, Ph.D.
Vice President, Systems Solutions and Strategic Development

William Shiner
Vice President, Industrial Markets

George BuAbbud, Ph.D.
Vice President, Telecommunication Products

Thomas Burgomaster
Vice President, Corporate Controller

Yuri Erokhin, Ph.D.
Vice President, Strategic Marketing

Paolo Sinni
Vice President, Treasurer and US Controller

general information

CORPORATE OFFICE
IPG Photonics Corporation
50 Old Webster Road
Oxford, Massachusetts 01540
Tel: (508) 373-1100

http://www.ipgphotonics.com

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM
Deloitte & Touche LLP
200 Berkeley Street
Boston, MA 02116

TRANSFER AGENT
Computershare Investor Services
250 Royall Street
Canton, MA 02021
Tel: (800) 942-5909

STOCK SYMBOL
IPG is listed on the Nasdaq Global Market. Ticker symbol:
IPGP

INVESTOR RELATIONS
Corporate news releases, our Annual Report and Forms 10-K and 10-Q are available online at: http://investor.ipgphotonics.com.

For printed materials, please request at http://investor.ipgphotonics.com/investorkit.cfm.

ANNUAL MEETING
The Annual Meeting of Stockholders will be held at
10:00 a.m. ET on Tuesday, June 4, 2013
IPG Photonics Corporation
50 Old Webster Road
Oxford, Massachusetts

FORWARD-LOOKING STATEMENTS
This Annual Report contains forward-looking statements that involve risks and uncertainties that could cause results to differ materially from those projected. Please refer to the introductory paragraphs which precede Item 1 and "Risk Factors" in Item 1A of the Annual Report on Form 10-K for a discussion of these risks and uncertainties.

(1) Compensation Committee
(2) Nominating and Corporate Governance Committee
(3) Audit Committee

50 old webster road
oxford, ma 01540 usa

www.ipgphotonics.com

IPGP
NASDAQ
LISTED